NOVEMBER 1961

NUCLEONICS

APPLIED RADIATION • ATOMIC POWER • NUCLEAR ENGINEERING

BUYERS' GUIDE

REFERENCE DATA

X-RAYING LARGEST STAINLESS STEEL "HOT" PUMP CASTING

Above, technicians mark segment of casting for one of many hundreds of X-ray pictures employing a 24,000,000 volt Betatron at the Bonney Floyd Foundry. *Below*, X-ray picture is carefully inspected for flaws.

Shown here is the largest single-piece stainless steel pump casting built today. The X-ray procedure is just one of the many inspections necessary to assure the high quality in Worthington nuclear pumps. Special designs were necessary to allow a single casting to be made for this size pump.

A more complete discussion of special equipment criteria and manufacturing techniques for nuclear requirements is available in a Worthington pamphlet, "Manufacturing For a Nuclear Power Plant." Ask for RP-1092.

To provide the special attention required to engineer and manufacture nuclear products, Worthington has an Advanced Products Division which specializes in pumps and other equipment for nuclear plants. For further information, write Worthington Corporation, Nuclear Department 106-7, Harrison, New Jersey.

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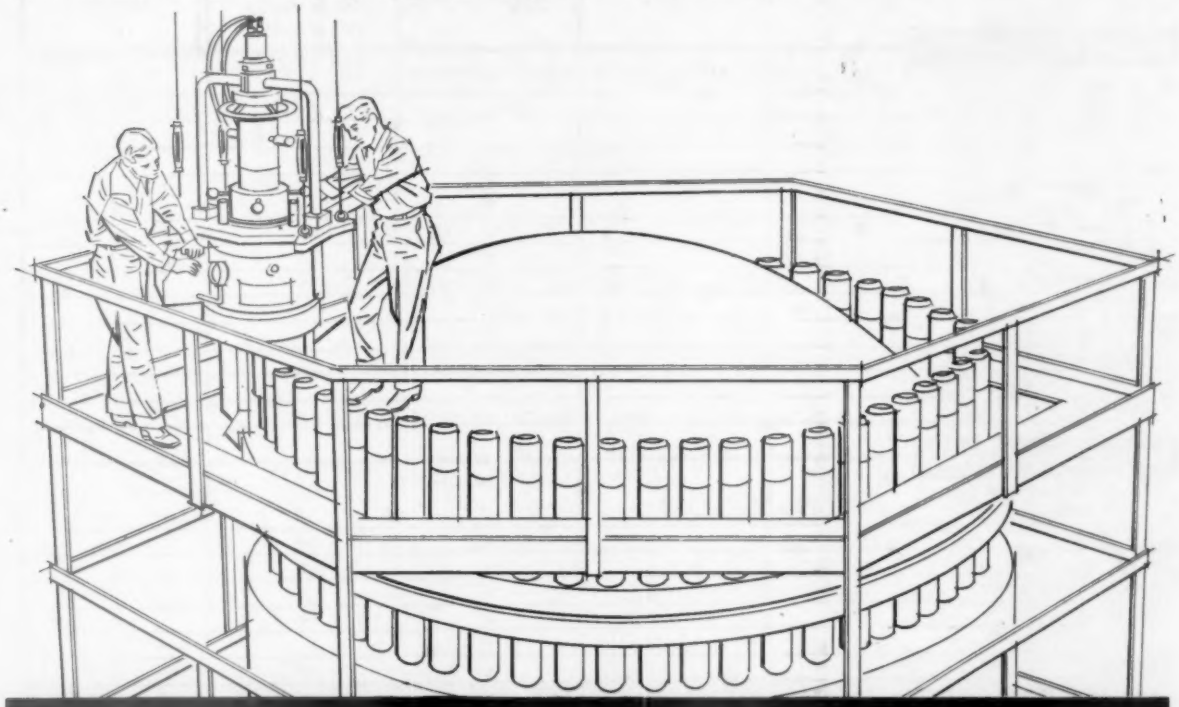

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Castings	√		√		√
Clad Materials	√		√	√	√
Control Rods					√
Dispersions				√	√
Fabricated Assemblies	√	√	√	√	√
Fabricated Shapes	√		√	√	√
Foil	√		√		√
Fuel Elements	√	√	√	√	
Fuel Rods		√	√	√	
Melt Stock	√		√		√
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NUCLEONICS

APPLIED RADIATION • ATOMIC POWER • NUCLEAR ENGINEERING

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...about NUCLEONICS

Reprints, Anyone?

Publication of a second NUCLEONICS Reference Data Manual (pp. 131–178) reminds us that we are concerned not only with monthly fare for the nuclear community. We are also proud that much that appears in NUCLEONICS joins the libraries of persons who have more than usual interest—those who buy reprints, quote us in other publications and write to authors.

Reprints from the Office

Special reports and staff-written articles are usually made available from the NUCLEONICS office, and the numbers that we sell are interesting indexes, we think, to our readers' interest in their subject matter. At the moment Ellen Hettel, the girl who handles such matters, reports that our outstanding champion is the September, 1959, "Building the Nuclear Navy," by John Kenton with sales of 3,800 copies. Many of these sales are in large numbers to institutions that have professional, political or commercial interest in nuclear ships.

Next in popularity is the 1956 special report, "How Radiation Affects Materials" with 1,300 sales. Running neck-and-neck for third with ~800 sales apiece are "Measuring Large Radiation Doses" (Oct. '59) and "Engineering Design of Power Reactors" (June '60). The Reference Data Manual published last November and our collection of NUCLEONICS Data Sheets 1–30 (reprinted Feb. '59) have sold ~500 each. Not to be overlooked are our "Reactors on the Line" foldouts, which are averaging better than 600 each.

Pigeons Are Flying

Sometimes the little items get around too. For example, we found out that the Danish word for "pigeon" is "duerne" by reading a translation of our painless-pigeon-population-control item (NU, July '61, 100) on the front page of the weekly *Ingeniøren's Ugeblad*. In general the subject is exciting quite a lot of interest. We find ourselves in a multidimensional correspondence with Alfons Puishes, who suggested the idea, James Hitch, AEC, Washington, who suggests some modifications, and R. O. Colestock, Minnesota Mining and Manufacturing, who says one might use microspheres (NU, Mar. '61, 116). We'll give you some of this exchange in a future Nuclear Reactions column.

The Authors' Mailbags

We ran down a couple of authors recently to ask about their reprint requests.

One was D. R. Kalkwarf ("Chemical Protection from Radiation Effects," May, '60), who reports a total of 280 requests including 50 special ones for an expanded version of one of his tables that we had offered in a footnote. About 50 requests were from Europe, predominantly from West Germany and England. Japan and Canada requested about ten each; Australia and South America, about five each.

Another item in which we had a special interest was the group of dosimetry conversion-factor matrices that appeared on the last page of last November's Reference Data Manual. The senior author, Susanne Ellis, wife of the junior author, Managing Editor Hobart Ellis, reports that she has filled ~40 requests from ten countries (Australia, Canada, England, France, Germany, Hungary, India, Spain, Sweden, U. S.)

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- REACTOR DESIGN
- PROPULSION REACTOR START-UP
- NUCLEAR ROCKET SAFETY ANALYSIS
- RADIATION EFFECTS ON ROCKET SYSTEM
- FUEL ELEMENT DEVELOPMENT
- VEHICLE DESIGN
- CRYOGENICS

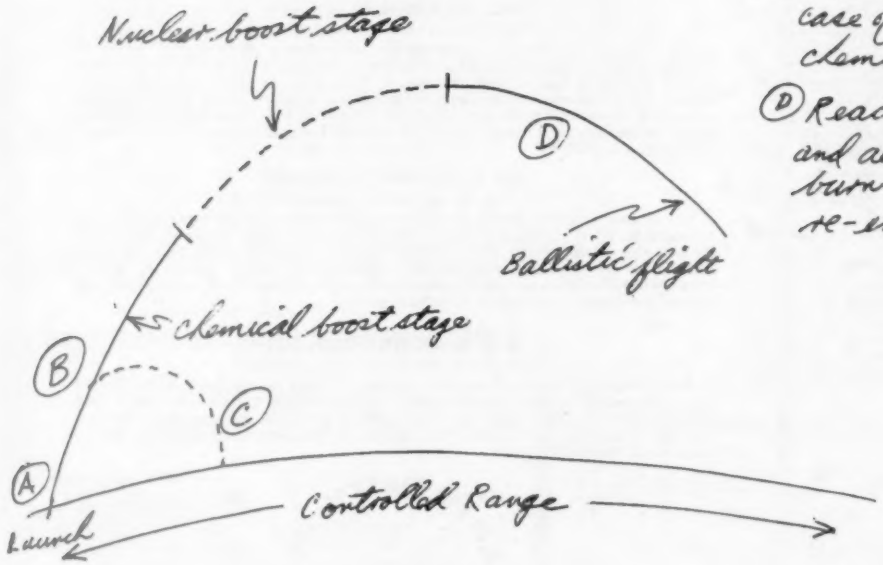
Safety Requirements

(A) Safe disposition of reactor in case of launch pad abort

(B) Rapid reactor start-up without risk of a nuclear excursion

(C) Safe disposition in case of abort during chemical boost

(D) Reactor fragmentation and aerodynamic burn-up during re-entry



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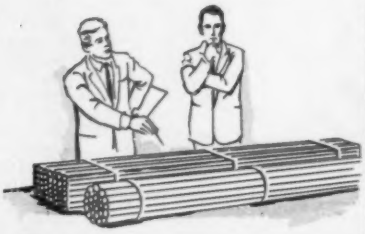

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Mr. Warren is a partner of Pickard-Warren-Lowe Associates, Washington, D.C., atomic energy consulting firm, and a Director of the Atomics, Physics & Science Fund. He was Deputy Director of the A.E.C.'s Construction and Supply Division, and Assistant to General Dynamics Executive Vice President for Atomic Energy.

JOHN E. GRAY

President and Chief Executive Officer

As Project Manager for Design and Construction, and later as Coordinator for Atomic Power, Mr. Gray supervised the construction and operation of the world's first nuclear power plant — Shippingport — for Duquesne Light Company. He was also A.E.C.'s Technical and Manufacturing Director at the Savannah River (H-Bomb) Plant, and active in Westinghouse's and General Electric's atomic programs. His nuclear experience dates back to the Manhattan Project.

DR. WARREN F. WITZIG

Vice President and Technical Director

Designer of the reactors in the "Skipjack" and "George Washington" series of nuclear powered submarines, Dr. Witzig was also responsible for the final stages of the nuclear design of the "Nautilus." Also, while at Westinghouse's Bettis Atomic Power Laboratory, he was manager of the program which determined the suitability of nuclear fuels and materials for use in the naval reactor program, and manager of the Natural Circulation Reactor Project. His work in the nuclear field began in 1942.

DR. C. R. McCULLOUGH

Director of Reactor Safeguards

A former and longtime chairman of the A.E.C.'s Advisory Committee on Reactor Safeguards, Dr. McCullough's work in the nuclear power field began in 1946 when he was appointed Director of the Power Pile Division at Oak Ridge, this being the first major activity in the development of peacetime nuclear power. Dr. McCullough was associated with Monsanto Chemical Company before joining NUS. He is past president of the American Nuclear Society.

DR. W. H. ARNOLD, JR.

Director of Nuclear Fuel Management

Formerly Manager of Westinghouse's Reactor Physics Design Section, Dr. Arnold was responsible for the nuclear design of the SELNI, Carolinas-Virginia Test Reactor, Saxton, SENA, and Southern California Edison nuclear fuel loadings, and active on that for Yankee. Prior to joining Westinghouse, he was a faculty member at Princeton.

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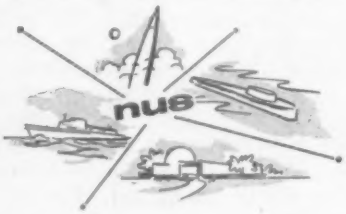

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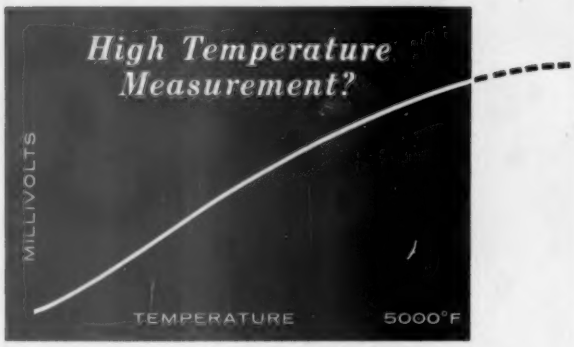

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- Irradiated fuel handling equipment
- Remote handling systems engineering
- Remotely controlled fabrication equipment
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- Reactor components and subassemblies
- Experimental and prototype mechanisms
- Particle accelerator components
- Remotely operated quality control equipment
- Precision machined parts, assemblies—tolerances to 1×10^{-4}"
- Research and development programs

OTHER DIVISIONS

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- Electrolytic and electric spark discharge machine tools
- Standard and special cutting tools
- Drill jig bushings and fixture components
- Optical contour projectors, mechanical gaging devices and surface plates
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- Precision production parts and assemblies
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- Close-tolerance hardened steel bushings
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CADILLAC GAGE COMPANY—All Divisions

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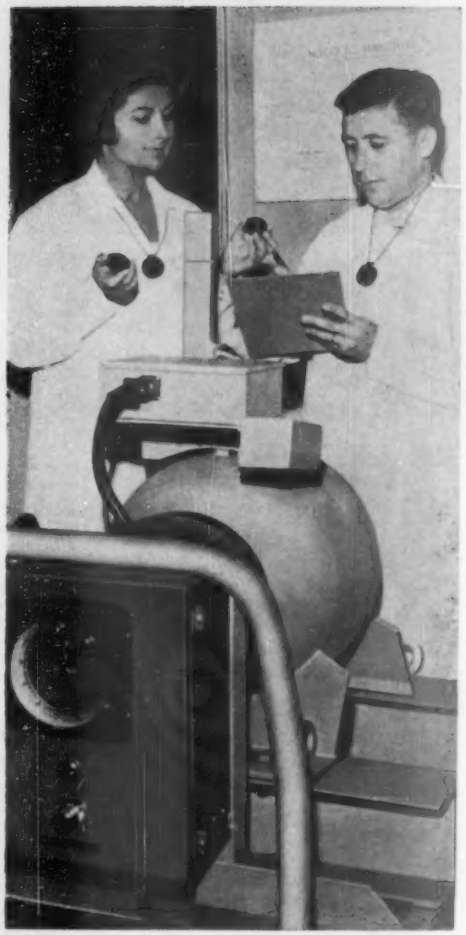
- Gaging and measuring equipment—tolerances to 1×10^{-6}"
- Parts, assemblies in lavas, ceramics, cermets—tolerances to 1×10^{-6}"
- Domestic manufacturing and engineering facilities: 128,000 sq. ft.

MICHIGAN TOOL COMPANY

- Special and standard gear generation and fabrication
- Gear production equipment—workpieces more than 200" diameter
- Precision cold-working "chipless" machine tools
- Ultraprecision indexing equipment—accuracy to 7×10^{-6}° arc in 12" diameter
- Domestic manufacturing and engineering facilities: 387,000 square feet



GAMMAX

IMPROVED DOSIMETER BY INDUSTRIAL ELECTRONIC HARDWARE FOR ARMED FORCES, CIVIL DEFENSE, NUCLEAR REACTOR INSTALLATIONS, NUCLEAR LABORATORIES, AND RADIATION FACILITIES

Some of the features of the GAMMAX DOSIMETER are:

- **Range 0-10,000 roentgens**
- **Flat response from 80 kev to 1.3 Mev regardless of angle of incidence**
- **Accuracy 10 roentgens or 20%, whichever is higher**
- **Stable against environmental conditions**
- **Water-tight**
- **No maintenance or upkeep required by wearer**
- **Ready for use at all times**
- **Compact**
- **Light weight—1¼ ounces**
- **Low cost**

In the event of atomic calamity, an accurate knowledge of the amount of X and gamma radiation received by an individual may save his life. A dosimeter is a device that supplies this information. Not only must it give accurately the dosage received, but it must function properly under the severe conditions expected during an attack. Each locket in the picture is a GAMMAX DT60C/PD*, a non-self-indicating casualty range dosimeter which has been developed by the Industrial Electronic Hardware Corporation with these purposes in mind.

** Patent applied for*

For further information, write . . .

INDUSTRIAL ELECTRONIC HARDWARE CORP.

109 Prince Street, New York 12, N. Y.

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1

2

3

1 POWER REACTOR SYSTEMS, PLANTS

—complete line advanced boiling water reactors up to 500,000 kw

—eight reactors currently being built or already operating

2 NUCLEAR FUEL

—design, processing, fabrication

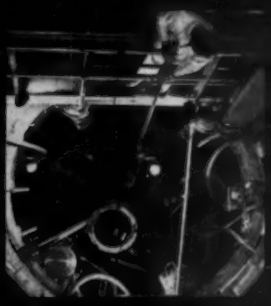
—elements already supplied for 32 reactors

3 NUCLEAR INSTRUMENTATION

—from individual instruments to complete systems

—already installed or specified for 33 reactors

4



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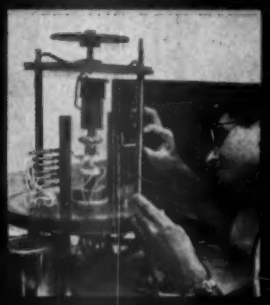

6

4 IRRADIATION SERVICES

—design and preparation of assemblies, design and operation of loops, irradiation, in 30,000 kwt G-E Test Reactor post-irradiation analysis

5 ISOTOPES

—isotope production and radiation effects studies for industry, medicine, and agriculture

6 RESEARCH & DEVELOPMENT SERVICES

—advanced engineering and feasibility studies including reactor design, fuel development, physics investigations, material investigations, heat transfer and hydraulic studies

GENERAL ELECTRIC TOTAL NUCLEAR CAPABILITIES—General Electric designs, develops, and manufactures all types of nuclear equipment for peaceful applications—with highly trained, experienced personnel—in extensive facilities. Each product area benefits from the interchange of knowledge accumulated by a Company with total nuclear capabilities. For specific information on these nuclear activities, contact your nearest General Electric sales office or write to Section 136-02, General Electric Company, Schenectady, New York.

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- Lead equivalence—tested per Federal specifications. ZZ-C-458.

NOM. THICK.	MIN. LEAD EQUIV.
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.030" (1/32")	.25mm
.060" (1/16")	.50mm
.120" (1/8")	1.00mm

- No change after exposure to 1,000,000 roentgens; no change after exposure to Ultra Violet and Infra Ray.
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MODEL 4575 5 KV-1 ma. DC POWER SUPPLY

For an output voltage of 5 KV DC at 1 milliampere, the low voltage input requirement is 250 V at 50 milliamperes. By varying the DC input the output voltage can be varied from approx. 1 KV to 7½ KV. Dimensions: 5½" high x 5" deep x 4½" wide. In completely enclosed metal housing.
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MODEL 4575PN—Reversible polarity. High voltage secondary floating or can be grounded. 1 ma. at 5 KV. $42.50 Net
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A **Compensated ion chamber** ● flux levels—2.5 x 10^8 to 1.0 x 10^{11} nv ● temp maximum—300°C; life—10^{19} nvt

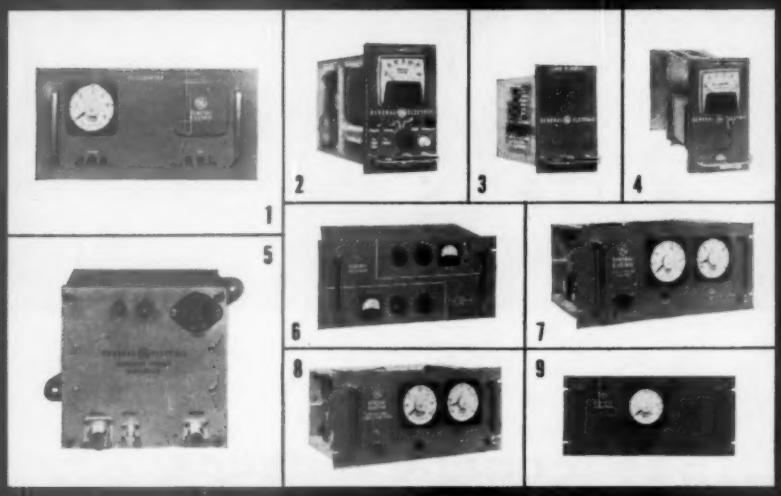
B **Uncompensated ion chamber** ● flux levels—2.5 x 10^8 to 1.0 x 10^{11} nv ● temp maximum 300°C; life—10^{19} nvt

C **Fission counter chamber** ● counter flux levels—1.5 to 1.5 x 10^6 nv; chamber flux levels 5 x 10^8 to 2 x 10^{10} nv ● maximum temperature 300°C; life—10^{19} nvt

D **Gama sensitive ion chamber** ● gamma flux range—1 to 5 x 10^7 R/hr ● temp max., 300°C

E **Neutron proportional counters** ● flux levels—1.2 x 10^{-1} to 1.7 to 10^4 nv or 4.0 x 10^{-2} to 1.7 x 10^4 nv ● temp maximum 150°C; life—10^8 sec at 10^{10} nv

F **In-core flux monitors** ● sensitive length 1"; OD of chamber 1/4" ● flux range—10^{10} to 10^{14} nv



1 **Picoammeter** accuracy 3 percent; zero drift less than 0.25 percent ● input range—10^{-13} to 10^{-3} amps in 19 steps

2 **Flux amplifier** ● zero drift—less than 0.5 percent; automatic self-testing ● range—10^{-7} to 10^{-3} amperes

3 **Logic element** ● normal signal input—12 volts D.C.; trip—1.2 volts or less ● one out of four or two out of three coincidence circuits

4 **Actuator amplifier** ● response—less than 5 milliseconds ● output—one ampere at 24 volts dc; input—normal 12 volts D.C.

5 **Current pulse amplifier** ● to receive and amplify fission counter or proportional counter signals over cable lengths up to 2,000 ft.

6 **High voltage power supply** ● stability ±0.1 percent (100 hours) ±0.3 percent long term ● output voltage—500 to 1500 volts ±

7 **Log-N period amplifier** ● drift: less ±2 percent at 3 second period ● range: 10^{-11} to 10^{-4} amperes: period range—30 seconds to infinity to +3 seconds

8 **Log countrate meter with or without period** ● accuracy—ratio of true to observed reading always greater than 0.7 and less than 1.4 ● range—10-10,000,000 counts-per-minute

9 **Linear count rate meter** ● accuracy ±2 percent of selected full scale; stability within 1 percent ● range—10 to 10^7 counts-per-minute in ten overlapping ranges

GENERAL ELECTRIC NUCLEAR INSTRUMENTATION—available for reactor monitoring and control systems including the products shown above—and now, for area and process monitoring featuring continuous radiation counting with increased sensitivity. Both reactor and industrial-grade instrumentation to meet your nuclear needs. Experience-proved by over 25 major systems installations in the atomic energy field alone. Whether it's a reactor, industrial or laboratory component or a complete nuclear instrumentation or safety system, at General Electric it will be designed and built by people who design, build and operate nuclear reactors and operate process lines and atomic laboratories. For more information write to Section 143-02, General Electric Company, Schenectady, New York.

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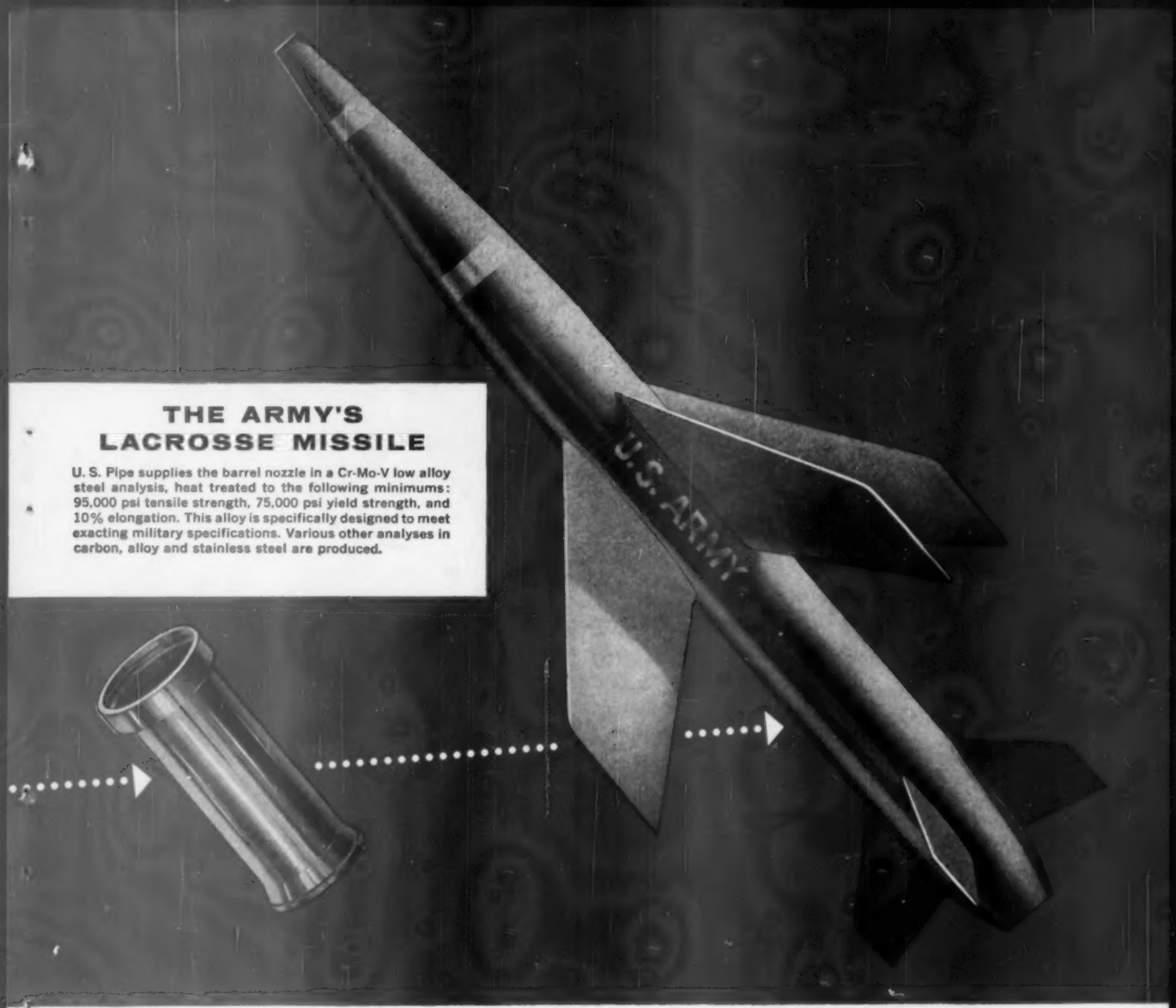
Now . . . basic characteristics of Metal Mold Centrifugal Casting contribute to the reliability of new Lacrosse Missile



THE ARMY'S LACROSSE MISSILE

U. S. Pipe supplies the barrel nozzle in a Cr-Mo-V low alloy steel analysis, heat treated to the following minimums: 95,000 psi tensile strength, 75,000 psi yield strength, and 10% elongation. This alloy is specifically designed to meet exacting military specifications. Various other analyses in carbon, alloy and stainless steel are produced.

Centrifugal casting, a direct production approach to quality, is now finding new and increasingly useful applications in rocketry and missile engineering.

U. S. Pipe, for example, supplies the alloy steel barrel nozzles for the Army's Lacrosse Missile as semi-finished, partially hot-forged lengths. These production pieces are being supplied to The Martin Company, Orlando, Florida — prime contractor for the Lacrosse, and to Parish Pressed Steel, Reading, Pennsylvania — subcontractor to The Martin Company. The contractors then finish machine them for assembly in the propulsion units.

Centrifugal casting offers ordnance design engineers several outstanding advantages:

1. Versatility. Many different alloy and stainless steel analyses, sizes and contours can be produced starting with a hollow billet.

2. Dependability. Years of experience in producing metal mold centrifugal castings assures high quality and reproducibility.

3. Economy. Maximum utilization of the *right* material produced with a minimum of processing to achieve overall efficiency.

Can these basic qualities meet the requirements and lower the cost of your material needs? Write today and outline your particular problem.

Size Range & Composition Flexibility
Outside Diameter—6" to 60" • Wall Thickness—⅜" and up
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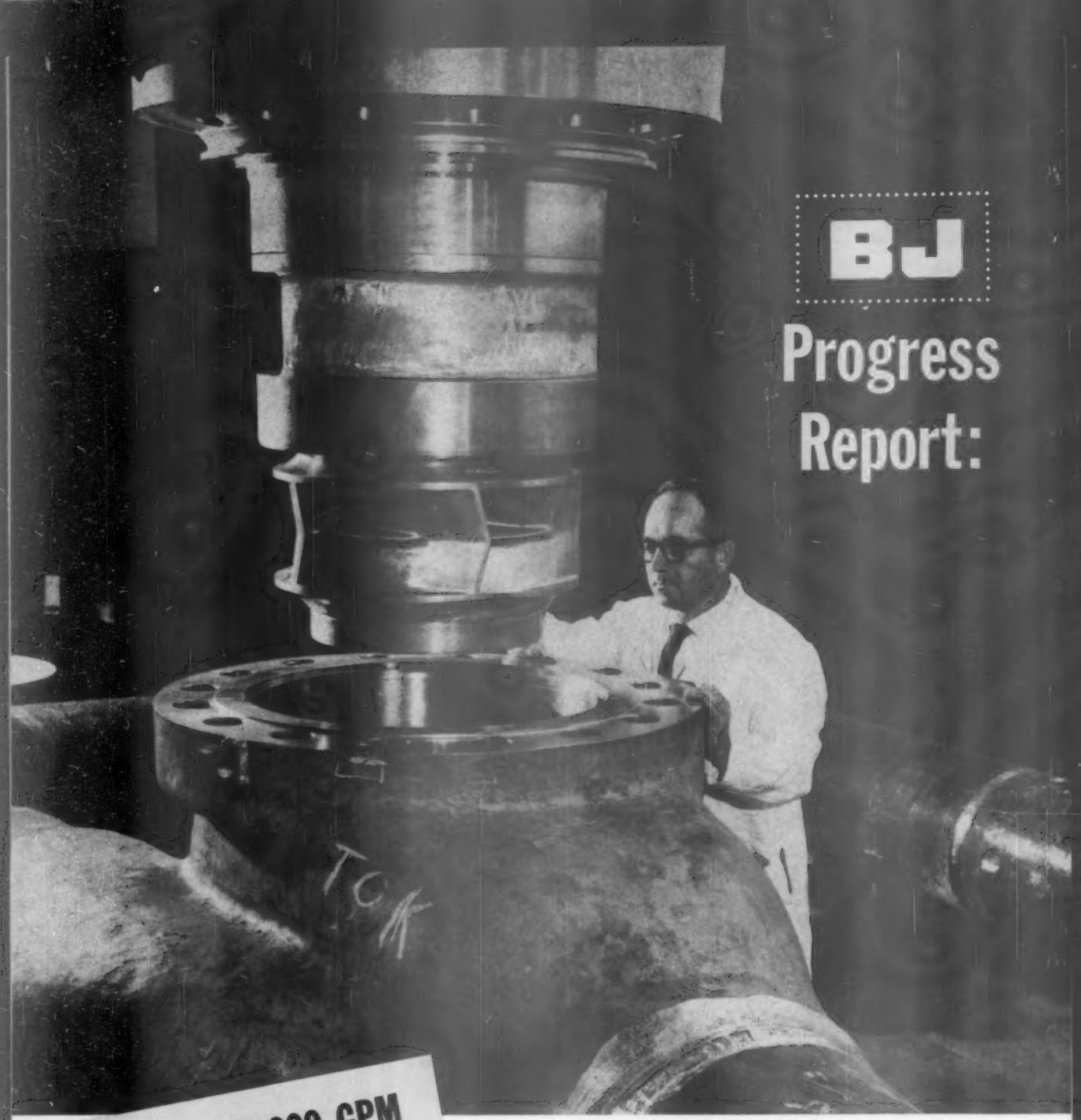


BJ

Progress Report:

16,000 GPM Mechanically-Sealed Primary Coolant Pumps go on 500 hour, 1,500 PSIG Hot Loop Test!

Hydraulic performance tests have been completed on the first mechanically-sealed pumps for primary coolant service of a central-station power reactor, and hot loop tests are under way at rated conditions. Built by Byron Jackson, these pumps are for Consumers' Power Company's new high-density nuclear power station at Big Rock Point, Michigan.

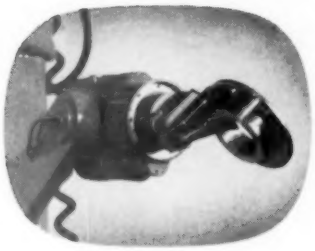
One of the many unique design features: a mechanical seal cartridge assembly which can be removed for maintenance *without breaking the main parting flange or removing drive motor!*

Byron Jackson Pumps, Inc.

Subsidiary of Borg-Warner Corporation

P.O. Box 2017, Terminal Annex, Los Angeles 54, California

BW BYRON JACKSON BORG-WARNER



New "Little Ranger" brings vehicular mobility to precise remote-manipulation.

Just 2 ft. wide and less than 3 ft. long, the Little Ranger can enter hazardous areas and perform complicated manipulations —even in cramped quarters. Its arm handles 50 lbs. with all the motions of the human arm and reaches from the floor to 8 ft. height. The vehicle itself will develop 800 lbs. draw-bar pull. Optional equipment includes single or dual TV cameras, a space microphone and a 500 lb. capacity hoist/winch.

General Mills, having produced electro-mechanical manipulators for nearly all major nuclear facilities in the free world, has the experience needed to solve most remote handling problems. A standard model Mechanical Arm may well meet your needs without custom changes. Send for details.

6 Standard Mechanical Arms—all with electric drives, portable fingertip controls and connections for remote power tools all give precision manipulating capability.

Model 100—complete low cost system, full cell coverage and 200 lb. lift.

Model 150—maximum versatility in minimum space, i.e., alpha-gamma handling in a sealed dry box.

Model 300—lifts up to 750 lbs.

Model 500—medium size, handles up to 2000 lbs.

Model 550—for heavy loads, handles 100 lbs. even when cantilevered to 18 ft.

Model 700—strongman, lifts up to 5000 lbs.

General Mills

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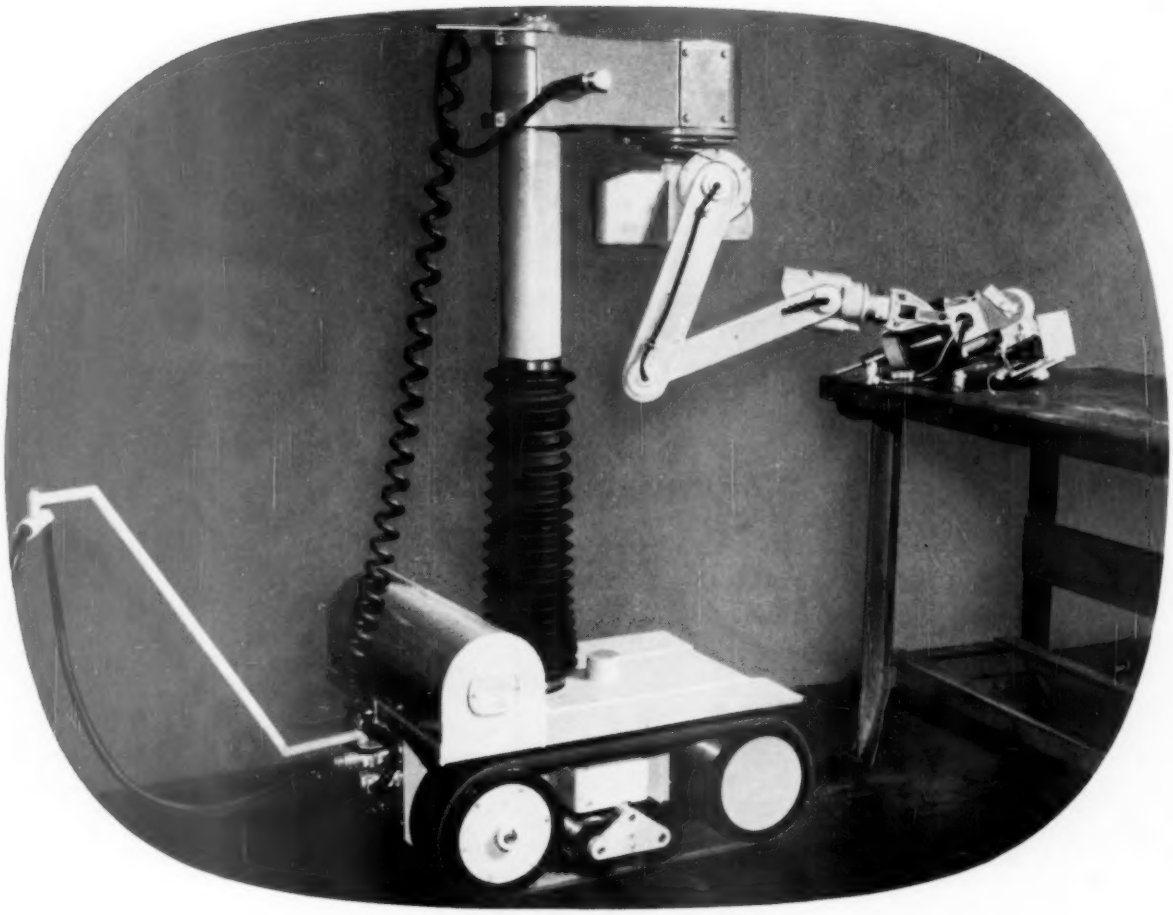

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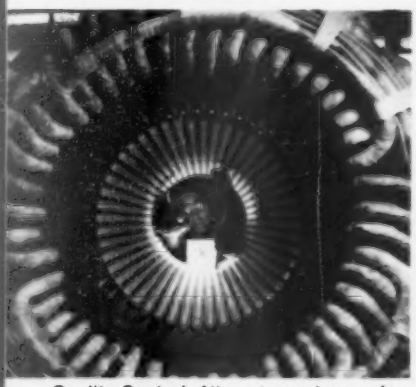
Westinghouse supplies all these vital mechanical components for nuclear reactor plants

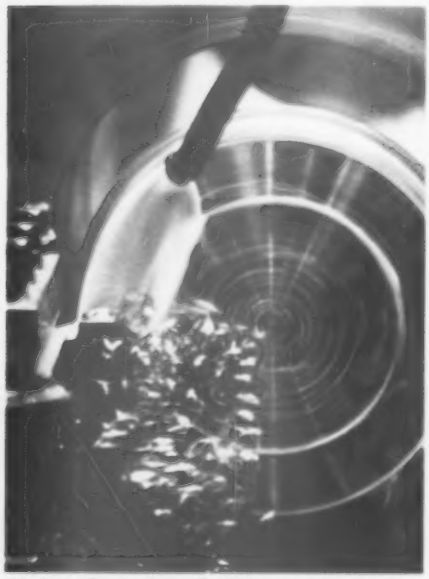
Canned Motor Pumps. This skilled technician is machining a canned motor pump shell and flange on a modern 100" vertical boring mill. Pump is an important nuclear reactor component.

Nuclear Reactor Valves. This 24" motor operated gate valve has been machined and is ready for testing before shipment for SELNI in Italy. Valve is one of many Westinghouse designs for reactor plant primary systems.

Control Rod Mechanisms. Inspector is working on a control rod mechanism to be installed in new Saxton, Pa., reactor. Moving parts of mechanism are hermetically sealed.

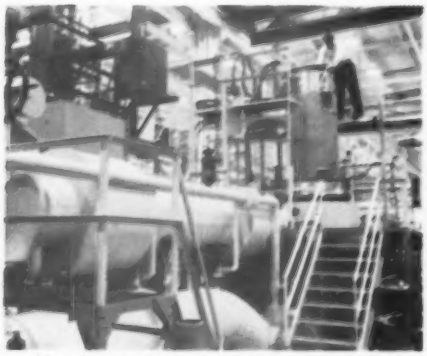


Quality Control. All equipment manufactured by the Atomic Equipment Department is subjected to maximum quality controls. Stringent hydraulic, electric and mechanical inspections result in essentially maintenance-free performance.

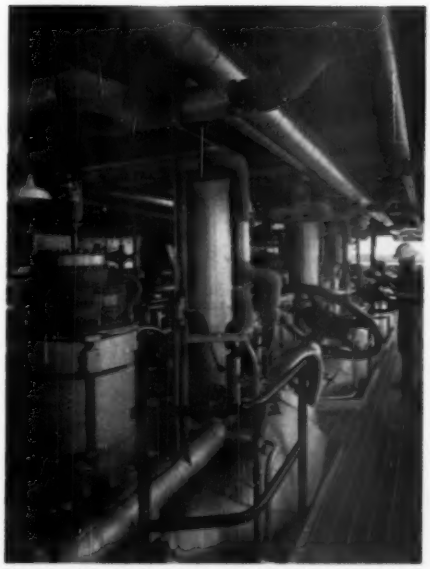


Modern Production Facilities. Advanced production and testing equipment in modern plant at Cheswick, Pa., make Westinghouse Atomic Equipment Department the most complete facility of its type in the world.

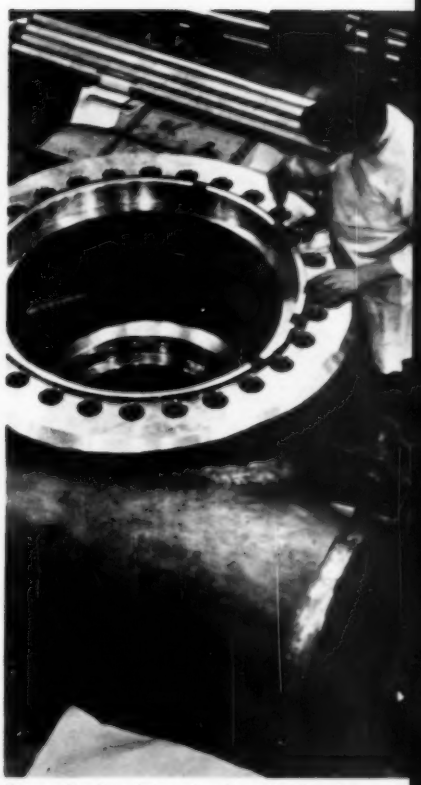
...and canned pumps for controlled circulation boilers



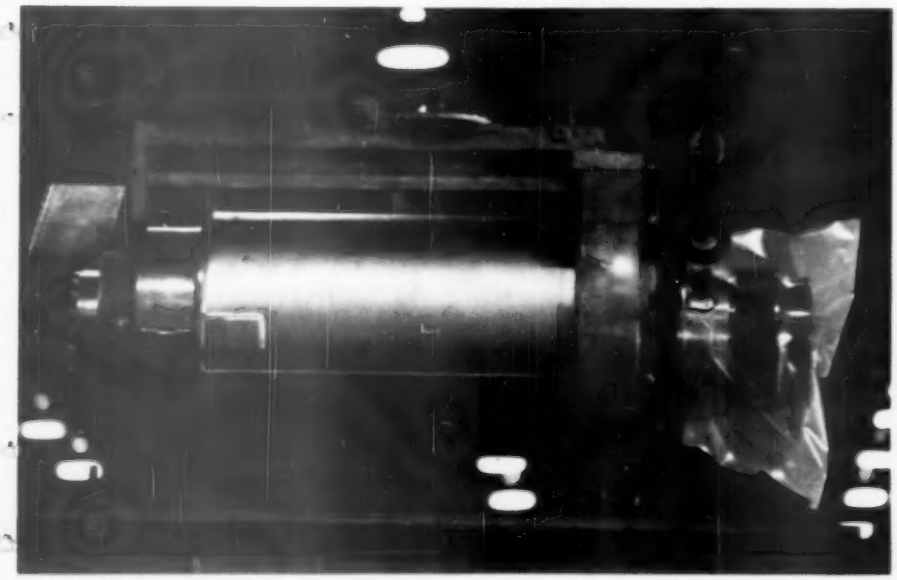
Test Loops. Eight test loops are available at the Atomic Equipment Department for rigid testing of all products. Loops can be adapted to handle flows from 1 to 40,000 g.p.m.



Westinghouse Pumps Installed. Three Westinghouse canned motor pumps are shown installed in power plant in Hartsville, South Carolina. Motor and pump casing completely enclose the pump shaft, eliminating the problems of the seal-injection system.



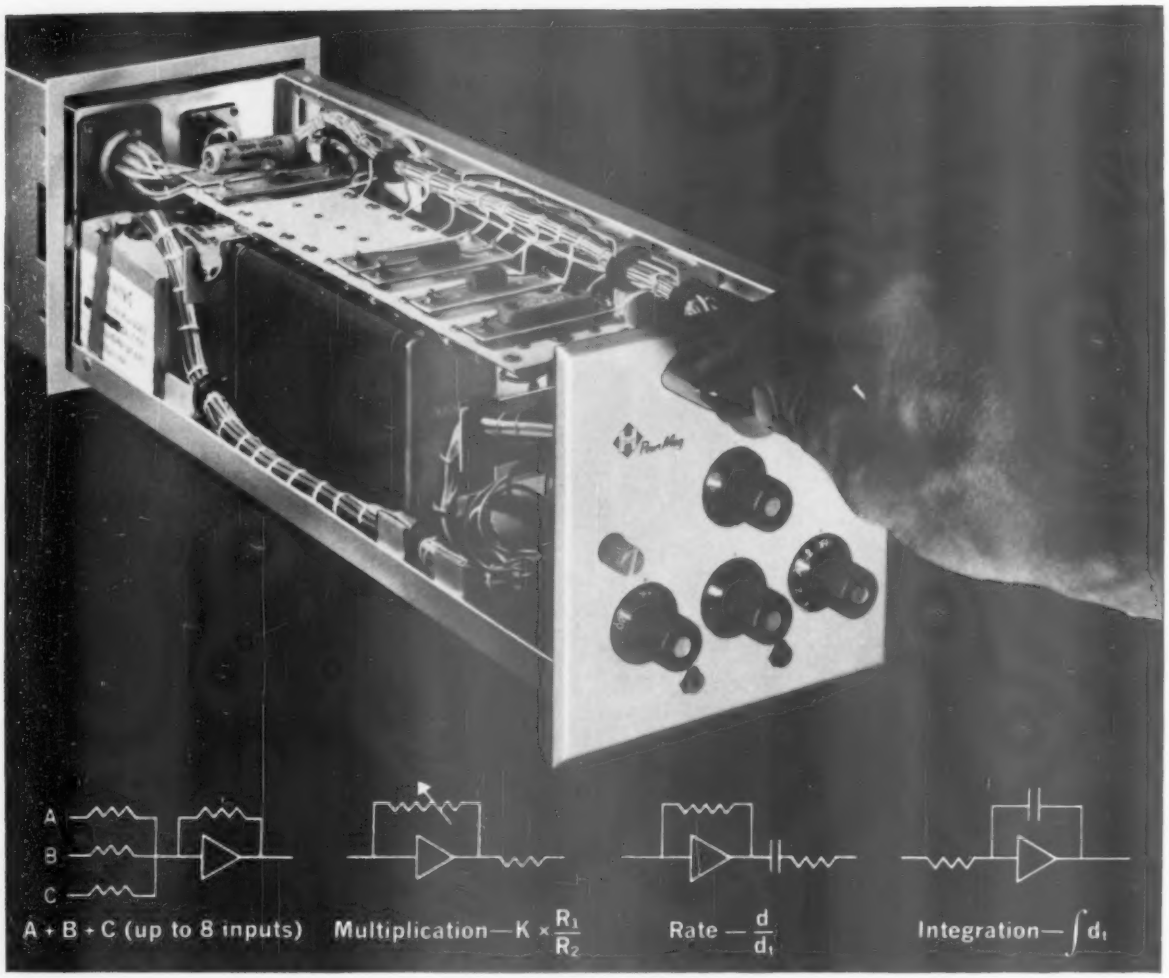
Pump Casing. This nine-ton steel casing will be installed with a canned motor pump in a nuclear reactor plant. Casing and pump form a leakproof unit.



Controlled Circulation Boiler Pumps. Westinghouse manufactures canned motor pumps such as this for service with Combustion Engineering controlled circulation boilers. Standardized pumps are available in many head and flow combinations for these high temperature, high pressure boilers.

Westinghouse

J1-58005



for Atomic Power Plants...
Hagan PowrMag® Controller—solid state reliability

Hagan's PowrMag controller combines the kind of reliability required by atomic power plants with a flexibility of application that makes this one controller suitable for all control actions. Utilizing a high gain, operational magnetic amplifier, PowrMag can produce the full range of control actions by simple negative feedback through ordinary resistors or capacitors. These "passive network" elements are simply and easily plugged into the basic amplifier chassis by means of an integral plug-board, as shown in the photograph.

The PowrMag system uses high level control signal DC voltages which eliminates noise, capacitive loss and phase shift problems. This electrical transmission of sensing unit signals as well as control signals eliminates the use of pneumatic lines in problem areas. The entire amplifier is first potted, then cased in steel. Since any unit can perform any control action by a simple change of plug-in components, inventory and stocking problems are eliminated. Power supply is unregulated 110vAC, and power consumption is three watts.

Each module is equipped with a pilot light to indicate fuse failure, test jacks to plug in an output meter, calibrated knobs for set point (bias), gain, reset and rate. Controller components can be replaced without a soldering operation.

The complete PowrMag line includes the controller, remote control stations, sensing elements, and final operators. For information on the application of Hagan equipment to atomic power plants, write or phone NUCLEAR POWER DIVISION, Room 808, Hagan Center, Pittsburgh 30, Pennsylvania.

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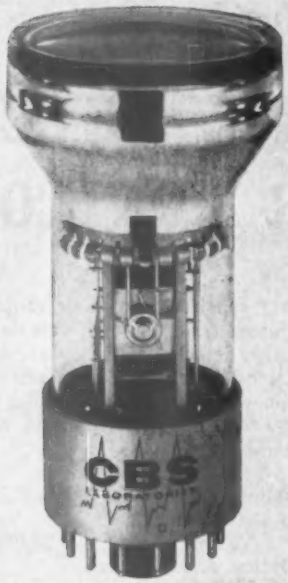
CBS TYPE 7818 PHOTOMULTIPLIER



For Gamma-Ray Spectrometers, Flying Spot Scanners, and Photometric Instruments

Sensitive to the blue region of the spectrum, this new 3-inch diameter, 10-stage, end-on tube has a plano-concave faceplate to insure uniform sensitivity across its face. Focusing is accomplished by means of a separate electrode to optimize photoelectron collection and to improve resolution.

The tube's linear multiplier structure provides short transit-time spread and fast rise time; shock and vibration specifications of the rugged multiplier structure are guaranteed by CBS.

The 7818 is one of CBS' complete line of photomultipliers; a catalog of detailed specifications is available on request.

Engineers and Physicists: If you are experienced in electron optics or electronics research and development we invite you to investigate our employment openings. An Equal-Opportunity Employer.

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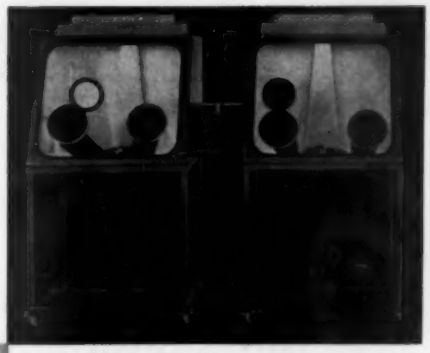
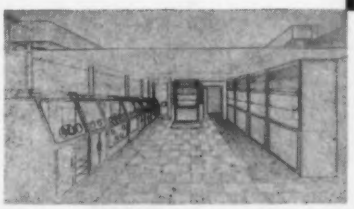
designed with the scientist in mind

Eringard enclosures are available to you in single and multiple units—or if a project requires, our research department can design and build complete enclosure laboratories to fit your every enclosure need.





The Eringard enclosure features a full length show case window permitting unobstructed visibility of the interior. In use there are no blind areas presented to the worker.

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A complete line of beryllium compounds including liquid nitrate is available NOW.

**Trade name for beryllium oxide produced by Mincon.*

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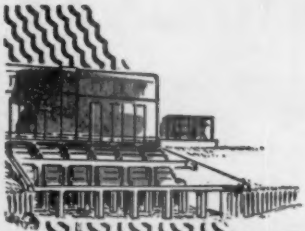
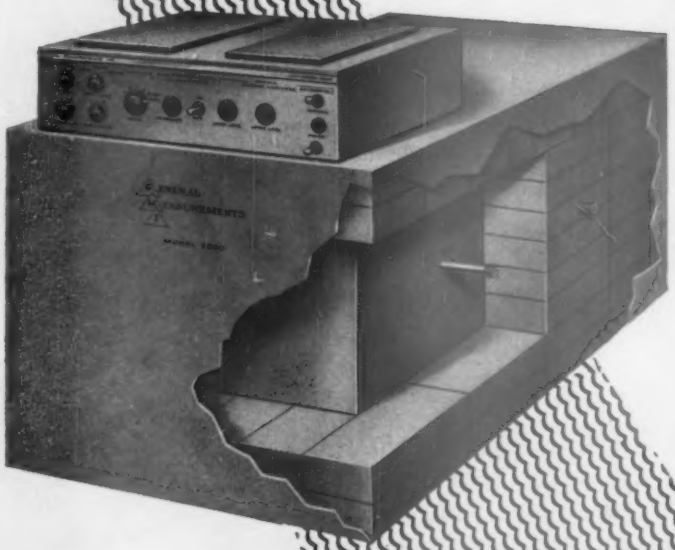


Continuous Flow System:

LOW RADIOACTIVITY LEVEL WATER MONITOR



The ultimate sensitivity of any radiation counting system depends upon sample volume, geometry, detector efficiency and background. All of these factors have been considered in the design of the Model 3800 Continuous Low Radioactivity Level Water Monitor.

- Sample Volume More Than 16,000 CC
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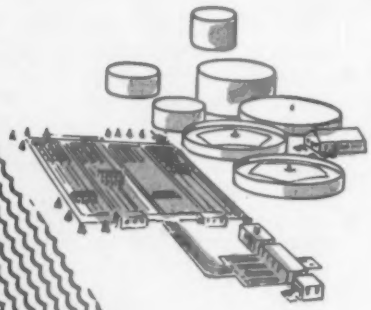
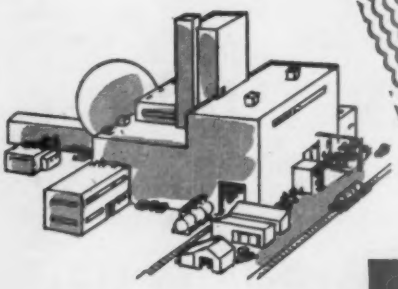
This system will measure 10 micro-microcuries per liter in less than 3 minutes with 95% reliability in continuous flow.





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Dramatically smaller multiplier phototubes with features heretofore found only in the larger types, the new RCA-7764 and -7767 shown here *actual size* offer significant advantages in radiation-detection applications, where *multiplier phototube performance is a must, but where small size is a necessity.*

Variations of these new types can be delivered to you "potted" with a voltage divider designed to meet your specifications. For more information, contact the RCA Field Office nearest you. Or write Marketing Manager, RCA Industrial Products Dept., RCA, Lancaster, Pa. For a free technical bulletin on the RCA-7764 or -7767, write: Section K-31-Q, Commercial Engineering, RCA Electron Tube Division, Harrison, N. J.

THE FACTS

Item	RCA-7767	RCA-7764
Stages	10	6
Median Sensitivity (Amperes/lumen)	7.5	0.3
Current Amplification	125,000	5000
Voltage Supply (Volts)	1250	1200
Response Range (Angstroms)	3000-6500 (S11)	3000-6500 (S11)
Max. Response (Angstroms)	Blue 4400	Blue 4400
Max. Rigid Length	4.0"	2.75"
Max. Diameter	0.78"	0.78"

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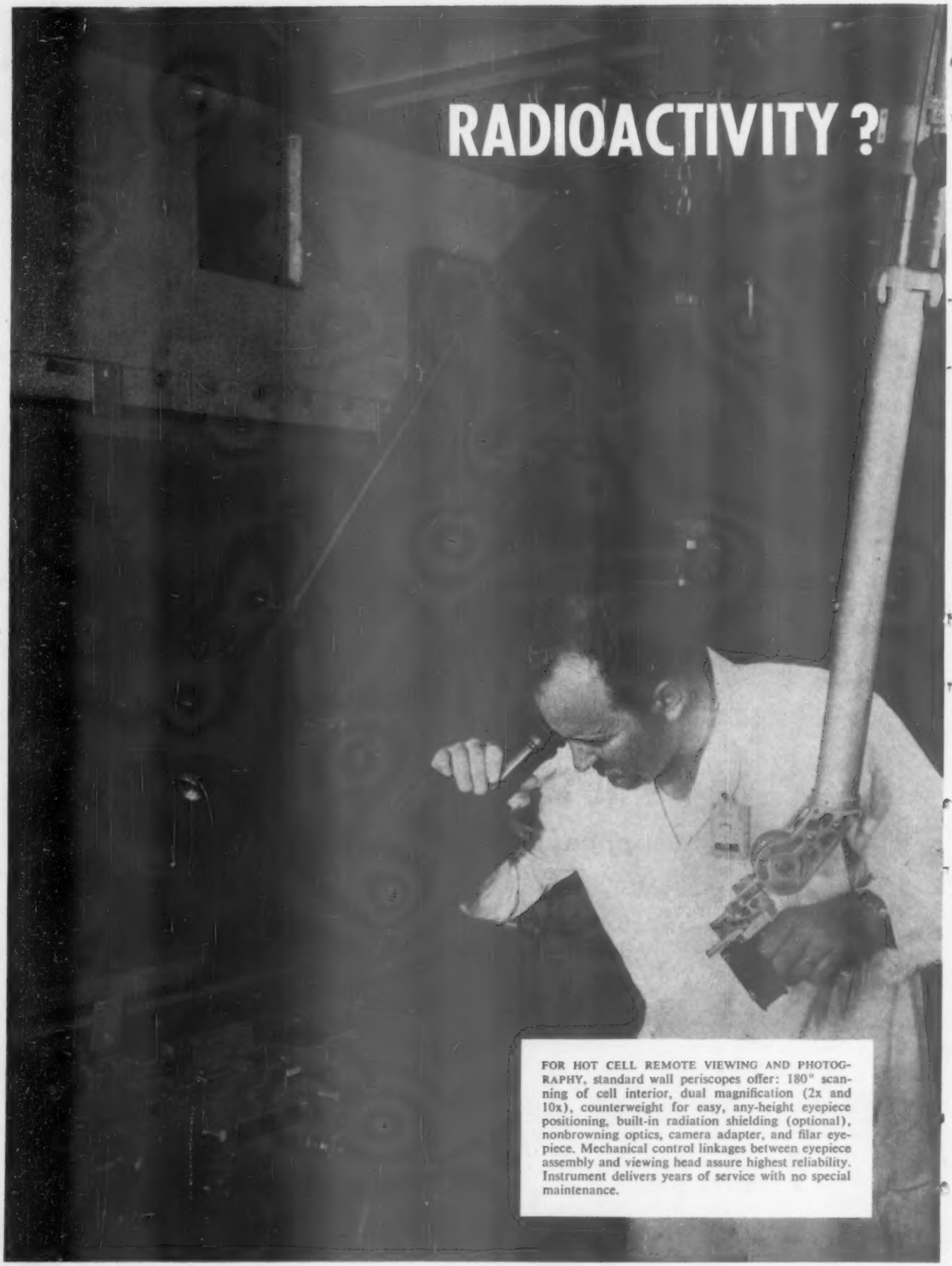

FOR HOT CELL REMOTE VIEWING AND PHOTOGRAPHY, standard wall periscopes offer: 180° scanning of cell interior, dual magnification (2x and 10x), counterweight for easy, any-height eyepiece positioning, built-in radiation shielding (optional), nonbrowning optics, camera adapter, and filar eyepiece. Mechanical control linkages between eyepiece assembly and viewing head assure highest reliability. Instrument delivers years of service with no special maintenance.

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- Sealing domes of molded and polished nonbrowning glass mounted inside the hot cell, which keep an undisturbed atmosphere by sealing the sleeve in which wall periscope is installed; special design permits back-fitting in existing facilities.
- Silent, gearless DC torque motors, developed and produced by Kollmorgen's Inland Division, which provide exceptional accuracy for direct-drive positioning of instruments; available with capacities from 0.1 to 3000 pound-feet.

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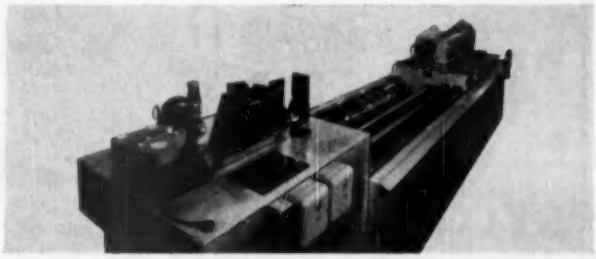

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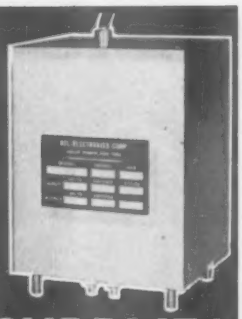

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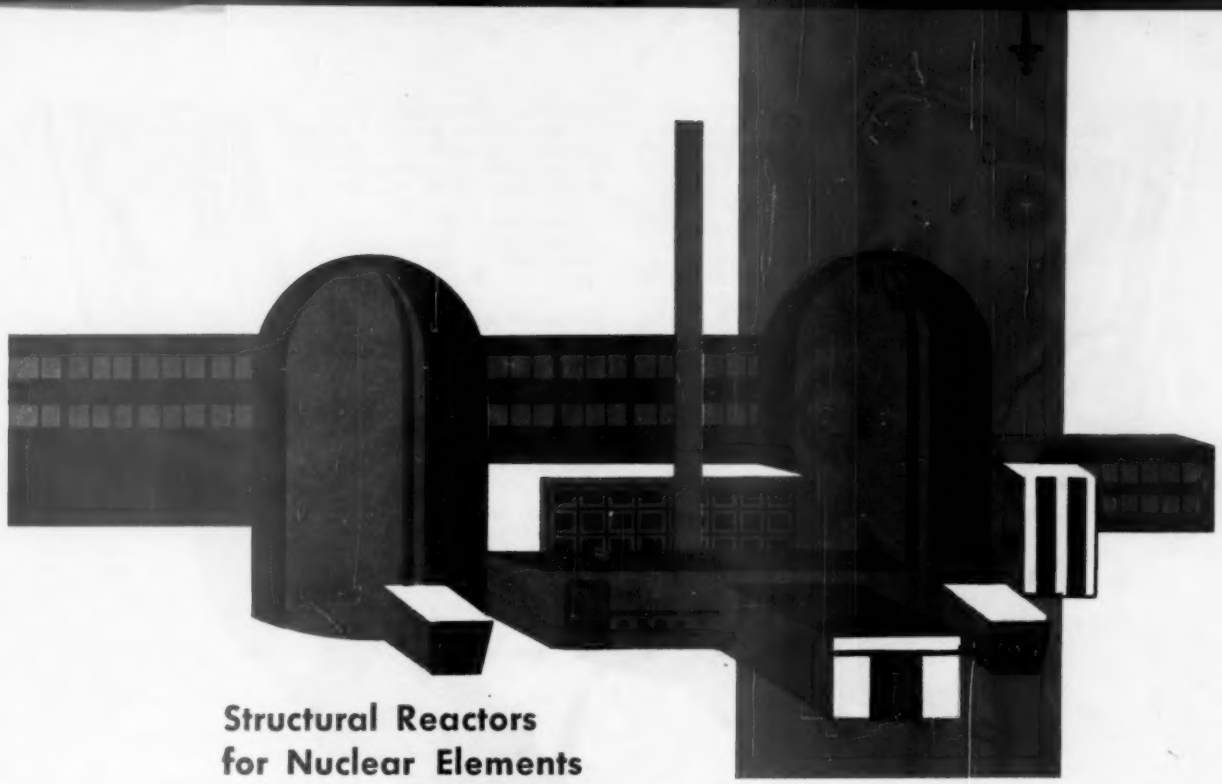

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CRL *master-slave manipulators outperform them all!*

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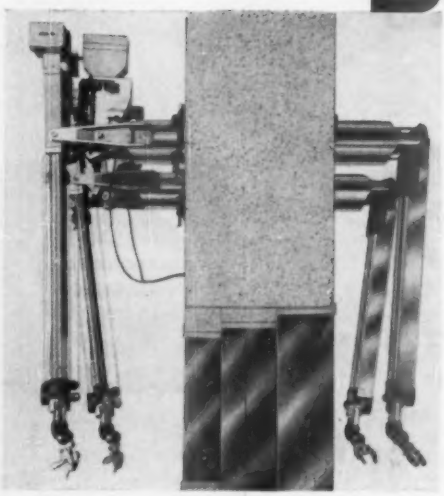

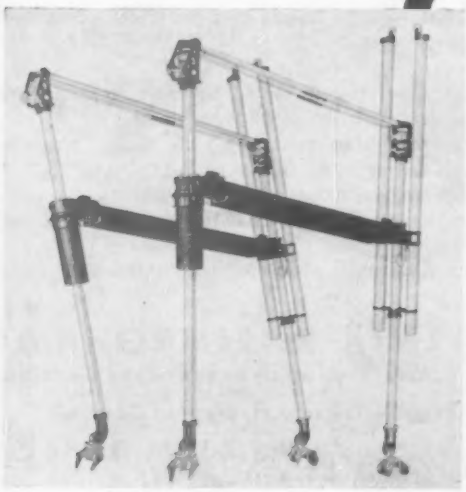

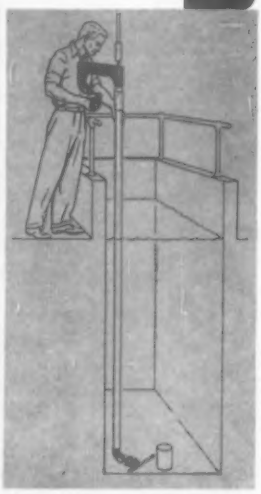

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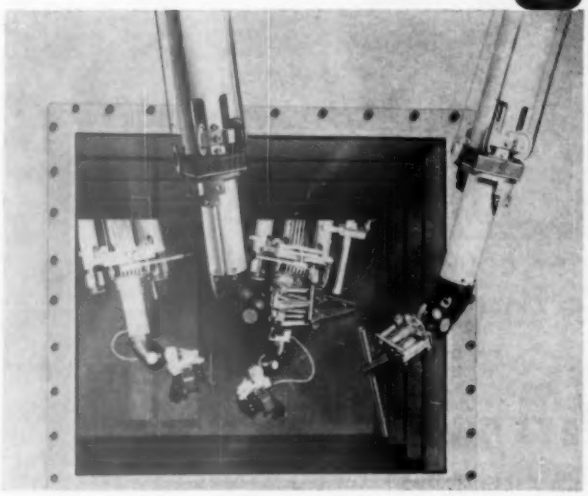

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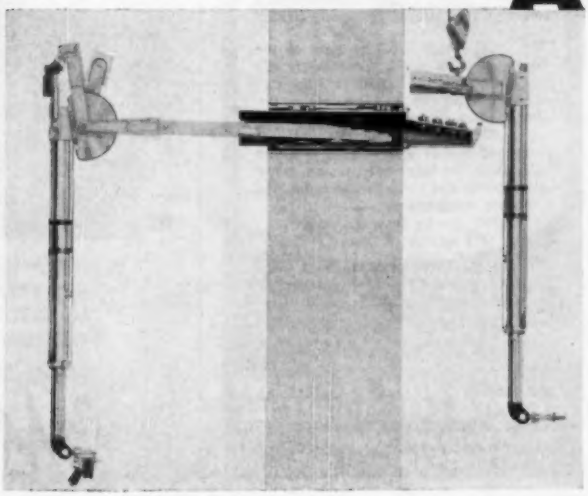

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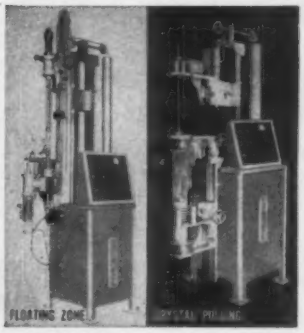

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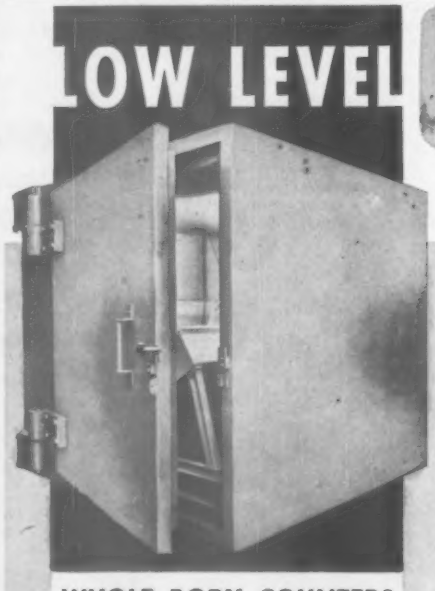

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TYPE	SIZE	FEATURES
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TYPE	SIZE	FEATURES
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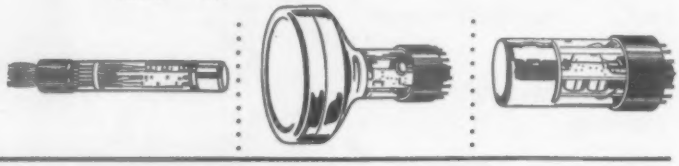
K2175	2"	
K2190	1¼"	



HIGH RESOLUTION CRT's

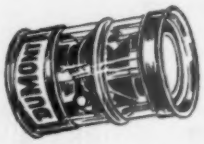
Du Mont CRT's provide smaller spot sizes at higher beam currents, enabling super-high resolution displays. Available in sizes from 3" to 7" with P1, P11 or P16 fine-grain phosphors. When spot sizes become smaller, they will come from Du Mont.

FIBER OPTIC CRT's

TYPE	FEATURES
2155	Electrostatic deflection and focus
2159	Electrostatic focus, magnetic deflection
2160	Magnetic deflection and focus

Du Mont fiber optic CRT's offer the greatest display resolution possible with 6,000,000 optic fibers per square inch. Direct optical coupling between phosphor to faceplate provides up to 80% increase in light transmission and collection efficiency—especially useful in boosting the display brightness of low light level phenomena. Contact photography—one of the greatest assets of fiber optic CRT's—enables extremely accurate, permanent records of display.

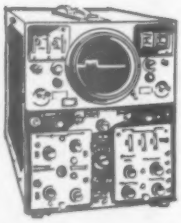
IMAGE CONVERTERS



Du Mont image converters sensitive to UV or IR—depending on photocathode used—are available in sizes up to 5". They are particularly useful for:

- Direct photography of nuclear tracks.
- Light amplification of very low light images (night vision) for astronomical and military purposes.
- Conversion of infrared images (due to temperature differences) into a visible display.

INSTRUMENTS FOR NUCLEAR INDUSTRIES



Du Mont Oscilloscopes are available with rise times capable of nuclear response measurements in many frequency ranges. Two plug-in circuits used simultaneously—such as used in the 420 and 700 Series—supply versatility unequalled for research, development and production purposes. Send for a complete catalog.

DU MONT

ALLEN B. DU MONT LABORATORIES, Clifton, N. J.

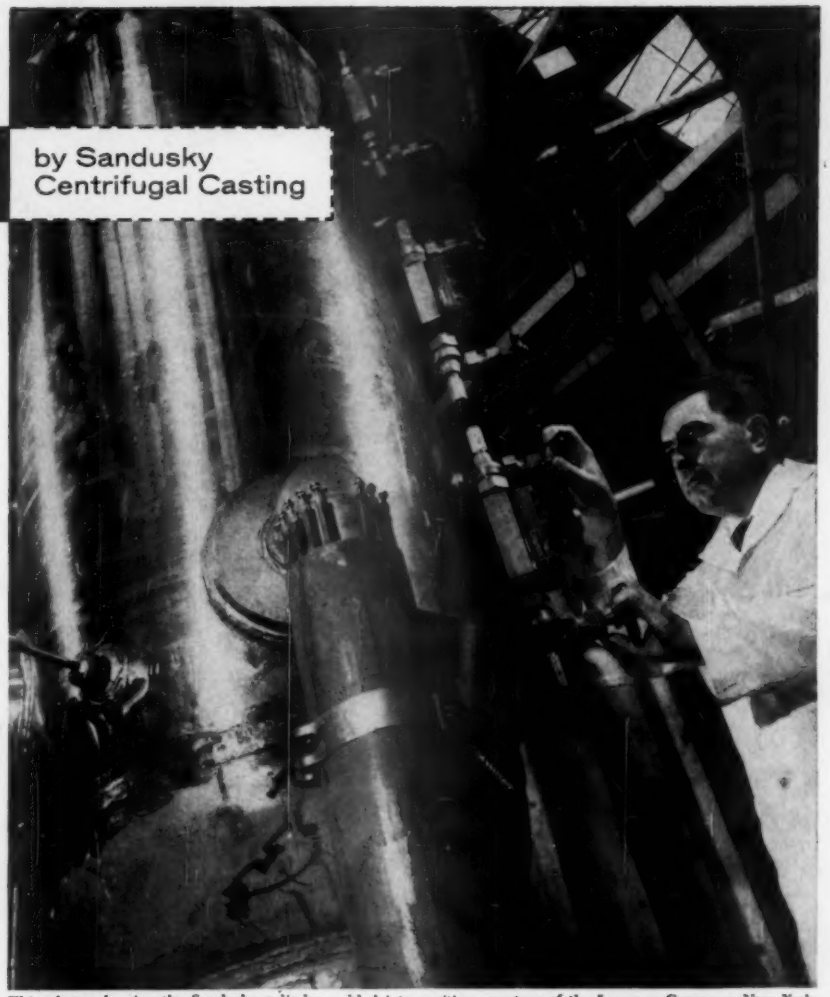
TUBE SALES DEPARTMENT

DIVISIONS OF FAIRCHILD CAMERA AND INSTRUMENT CORPORATION

→ TO LOCATE NEAREST SALES OFFICES, SEE GREEN SECTION.

When ordering or seeking information, please mention NUCLEONICS BUYERS' GUIDE ISSUE.

SOLVED: by Sandusky Centrifugal Casting



This photo, showing the Sandusky cylinder welded into position, courtesy of the Lummus Company, New York. New York who fabricated, assembled and tested the completed loop before shipping it to the ETR site in Idaho.

Nuclear Test Loop Uses Sandusky Centrifugal Casting as Pressurizer Cylinder

A Sandusky Centrifugal Casting is the main cylindrical component of an electrically heated pressurizer, designed by Knolls Atomic Power Laboratory to Section VIII, of the ASME Code (Unfired Pressure Vessels) for use in the new Engineering Test Reactor facilities at Idaho Falls, Idaho.

This 66¾" long cylinder, 27" O.D. with walls 2½" thick, was centrifugally cast of an 18-8 stainless steel (SA-351, Grade CF-8) for the extra corrosion resistance required under nuclear loop service conditions: demineralized water at temperatures to 650°F and pressures to 2500 PSI.

O. G. Kelley Co., Boston, to whom we delivered this 2-ton, fully machined cylinder, welded on the forged heads and nozzles, radiographed the welds, and hydro tested the completed vessel to 4300 PSI.

This is another example of the adaptability of Sandusky Centrifugal Castings to applications demanding the highest order of quality. They may well offer you a practical and economical answer to your cylindrical needs, also.

We are producing cylinders and piping in diameters from 7" to 54"—in lengths to 33 ft.—in a wide range of ferrous and non-ferrous alloys. Write for Bulletin 300, for more complete technical information on the Sandusky process and product application data.

SANDUSKY ® **CENTRIFUGAL CASTINGS**

FOUNDRY & MACHINE CO.

SANDUSKY, OHIO—Stainless, Carbon, Low-Alloy Steels—Full Range Copper-Base, Nickel-Base Alloys

→ TO LOCATE NEAREST SALES OFFICES, SEE GREEN SECTION.

When ordering or seeking information, please mention NUCLEONICS BUYERS' GUIDE ISSUE.

1961 Progress Report on the Nuclear Navy

Ship-bldg. Program Year	Ship No.	Ship Name	Shipyard	Reactor Type	Reactor Prime Contract	Dimensions Displ. tons—Length—Beam	Date (Future target dates in italics) Keel Laid	Launch	Start Sea Trials	Commiss'g.	Cost $10⁶
1952	SSN 571	NAUTILUS	Electric Boat	S2W	W	3,180 — 320 — 28	6-14-52	1-21-54	1-17-55	9-30-54	90
1953	SSN 575	SEAWOLF	Electric Boat	S2G S2W-A	GE W	3,260 — 330 — 30	9-15-53	7-21-55	1-21-57 8-23-60	3-30-57 9-30-60	94 +20
1955	SSN 578	SKATE	Electric Boat	S3W	W	2,360 — 208 — 25	7-21-55	5-16-57	10-27-57	12-23-57	50
1955	SSN 579	SWORDFISH	Portsmouth	S4W	W	2,360 — 268 — 25	1-25-56	8-27-57	8- 9-58	9-15-58	50
1956	SSN 583	SARGO	Mare I.	S3W	W	2,360 — 268 — 25	2-21-56	10-10-57	8- 3-58	10- 1-58	45
1956	SSN 584	SEADRAGON	Portsmouth	S4W	W	2,360 — 268 — 25	6-20-56	8-16-58	10- 5-59	12- 5-59	45
1956	SSN 585	SKIPJACK	Electric Boat	S5W	W	2,830 — 252 — 29	5-29-56	5-26-58	3- 8-59	4-15-59	65
1956	SSRN 586	TRITON	Electric Boat	S4G	GE	5,900 — 447 — 37	5-29-56	8-19-58	9-27-59	11-10-59	104
1956	SSGN 587	HALIBUT	Mare I.	S3W	W	3,555 — 350 — 29	4-11-57	1- 9-59	9-13-59	1- 4-60	65
1957	SSN 588	SCAMP	Mare I.	S5W	W	2,830 — 252 — 29	1-23-59	10- 8-60	4-10-61	6- 5-61	50
1957	SSN 589	SCORPION	Electric Boat	S5W	W	2,830 — 252 — 29	8-20-58	12-19-59	6-27-60	7-29-60	50
1957	SSN 590	SCULPIN	Ingalls	S5W	W	2,830 — 252 — 58	2- 3-58	3-31-60	3-28-61	6- 1-61	50
1957	SSN 591	SHARK	Newport News	S5W	W	2,830 — 252 — 29	2-24-58	3-16-60	1- 6-61	2- 9-61	50
1957	SSN 592	SNOOK	Ingalls	S5W	W	2,830 — 252 — 29	4- 7-58	10-31-60		*10- 2-61*	50
1957	SSN 593	THRESHER	Portsmouth	S5W	W	3,747 — 279 — 31	5-28-58	7- 9-60	4-30-61	8- 3-61	60
1958	SSN 594	PERMIT	Mare I.	S5W	W	3,747 — 279 — 31	7-16-59	7- 1-61		*4- 1-62*	50
1958	SSN 595	PLUNGER	Mare I.	S5W	W	3,747 — 279 — 31	3- 2-60	*12- 9-61*		*9-62*	50
1958	SSN 596	BARB	Ingalls	S5W	W	3,747 — 279 — 31	11- 9-59	*1- 6-62*		*11-62*	50
1958	SSN 597	TULLIBEE	Electric Boat	S2C	CE	2,175 — 260 — 29	5-26-58	4-27-60	10- 3-60	11- 9-60	75
1958	SSBN 598	GEORGE WASHINGTON	Electric Boat	S5W	W	5,600 — 380 — 33	11- 1-57	6- 9-59	11-15-59	12-30-59	110
1958 sup	SSBN 599	PATRICK HENRY	Electric Boat	S5W	W	5,600 — 380 — 33	5-27-58	9-22-59	3- 7-60	4- 9-60	90
1958 sup	SSBN 600	THEODORE ROOSEVELT	Mare I.	S5W	W	5,600 — 380 — 33	5-20-58	10- 3-59	12-12-60	2-13-61	90
1959	SSBN 601	ROBERT E. LEE	Newport News	S5W	W	5,600 — 380 — 33	8-25-58	12-18-59	9-31-60	7-16-60	100
1959	SSBN 602	ABRAHAM LINCOLN	Portsmouth	S5W	W	5,600 — 380 — 33	11- 1-58	5-14-60	1-31-61	3-11-61	100
1959	SSN 603	POLLACK	N. Y. Shipbldg.	S5W	W	3,747 — 279 — 31	3-14-60	*1-20-62*		*12-62*	50
1959	SSN 604	HADDO	N. Y. Shipbldg.	S5W	W	3,747 — 279 — 31	9- 9-60	*8-15-62*		*5-63*	50
1959	SSN 605	JACK	Portsmouth	S5W	W	3,747 — 279 — 31	9-16-60	*9-18-62*		*3-63*	50
1959	SSN 606	TINOSA	Portsmouth	S5W	W	3,747 — 279 — 31	11-24-59	8-26-61		*8-15-62*	50
1959	SSN 607	DACE	Ingalls	S5W	W	3,747 — 279 — 31	6- 6-60	*3-17-62*		*3-63*	50
1959	SSBN 608	ETHAN ALLEN	Electric Boat	S5W	W	6,900 — 410 — 33	9-14-59	11-22-60	6-18-61	8- 8-61	105
1959	SSBN 609	SAM HOUSTON	Newport News	S5W	W	6,900 — 410 — 33	12-28-59	2- 3-61		*1-25-62*	105
1959	SSBN 610	THOMAS A. EDISON	Electric Boat	S5W	W	6,900 — 410 — 33	3-15-60	6-15-61		*5-24-62*	105
1959	SSBN 611	JOHN MARSHALL	Newport News	S5W	W	6,900 — 410 — 33	4- 4-60	7-15-61		*5-24-62*	105
1960	SSN 612	GUARDFISH	N. Y. Shipbldg.	S5W	W	3,747 — 279 — 31	2-13-61	*1-15-63*		*12-63*	49
1960	SSN 613	FLASHER	Electric Boat	S5W	W	3,747 — 279 — 31	4-14-61	*12- 1-62*		*10-63*	49
1960	SSN 614	GREENLING	Electric Boat	S5W	W	3,747 — 279 — 31	8-15-61	*4- 1-63*		*5-64*	49
1960	SSN 615	GATO	Electric Boat	S5W	W	3,747 — 279 — 31	*12-15-61*	*8- 1-63*		*6-64*	49
1961	SSBN 616	LAFAYETTE	Electric Boat	S5W	W	7,000 — 425 — 33	1-17-61	*2-15-62*		*4-63*	109.5
1961	SSBN 617	ALEXANDER HAMILTON	Electric Boat	S5W	W	7,000 — 425 — 33	6-26-61	*10-15-62*		*6-63*	109.5
1961	SSBN 618	THOMAS JEFFERSON	Newport News	S5W	W	6,900 — 410 — 33	2- 3-61	*8-16-62*		*8-63*	105
1961	SSBN 619	ANDREW JACKSON	Mare I.	S5W	W	7,000 — 425 — 33	4-26-61	*9-16-62*		*7-63*	109.5
1961	SSBN 620	JOHN ADAMS	Portsmouth	S5W	W	7,000 — 425 — 33	2- 6-61	*8-16-62*		*8-63*	109.5
1961	SSN 621	HADDOCK	Ingalls	S5W	GE	3,747 — 279 — 31	4-24-61	*4- 6-63*		*5-64*	49
1961	SSBN 622	JAMES MONROE	Newport News	S5W	W	7,000 — 425 — 33	7-16-61	*8-31-62*		*9-63*	109.5
1961	SSBN 623	NATHAN HALE	Electric Boat	S5W	W	7,000 — 425 — 33	*10-61*	*1- 1-63*		*10-63*	109.5
1961	SSBN 624	Unnamed	Mare I.	S5W	W	7,000 — 425 — 33	*10-61*	*2-15-63*		*11-63*	109.5
1961	SSBN 625	"	Newport News	S5W	W	7,000 — 425 — 33	*10-61*	*11-30-62*		*12-63*	109.5
1961	SSBN 626	"	Electric Boat	S5W	W	7,000 — 425 — 33	*12-61*	*4- 1-63*		*1-64*	109.5
1962	SSBN 627	Unnamed	Newport News	S5W	W	7,000 — 425 — 33					
1962	SSBN 628	"	Electric Boat	S5W	W	7,000 — 425 — 33					
1962	SSBN 629	"	Mare I.	S5W	W	7,000 — 425 — 33					
1962	SSBN 630	"	Newport News	S5W	W	7,000 — 425 — 33					
1962	SSBN 631	"	Electric Boat	S5W	W	7,000 — 425 — 33					
1962	SSBN 632	"	Newport News	S5W	GE	7,000 — 425 — 33					
1962	SSBN 633	"	Electric Boat	S5W	GE	7,000 — 425 — 33					
1962	SSBN 634	"	Mare I.	S5W	GE	7,000 — 425 — 33					
1962	SSBN 635	"	Newport News	S5W	GE	7,000 — 425 — 33					
1962	SSBN 636	"	Portsmouth	S5W	GE	7,000 — 425 — 33					
1962	SSN 637	"	Unassigned	S5W		3,747 — 279 — 31					
1962	SSN 638	"	"	S5W		3,747 — 279 — 31					
1962	SSN 639	"	"	S5W		3,747 — 279 — 31					
1957	CGN 9	LONG BEACH	Both. Quincy	C1W	W	14,000 — 721 — 70	12- 2-57	7-14-59	7- 5-61	9- 9-61	320
1958	CVAN 65	ENTERPRISE	Newport News	A2W	W	86,500 — 1,102 — 133	2- 4-58	9-25-60		*11-12-61*	450
1959	DLGN 25	BAINBRIDGE	Both. Quincy	D2G	GE	7,900 — 564 — 56	5-15-59	4-15-61		*summer '62*	148
1962	DLGN 26	Unnamed	Unassigned	D2G		7,900 — 564 — 56					112

September Nucleonics carries this report.

and on its Suppliers

NOTE: Data on components for submarines since the 1957 shipbuilding program are correct as regards number of items ordered from each supplier, but are subject to changes in ship-assignment with variations in construction schedules.

Core	Press. Vessel	Steam Gen.	Pressurizer	Main Coolant: Pumps	Main Coolant: Stop Valves	Main Coolant: Check Valves	Rod drive Mechanisms	Reactor Rod Controls	Reactor Instrumentation	Primary Plant Instrum.	Steam Gen. Control	Turbine
W	B & W	2 FW	B & W	W	Chapman	Atw'd-Morrill	W	W	W	W	Bailey	W
GE	CE	2 B & W	none	GE	Crane	GE	Ford Instrum.	GE	GE	GE	Bailey	GE
B&W	B & W	2 FW	FW		Crane	W		W	W	W	W	
W	W	2 W	CE	W	W	Atw'd-Morrill	Bendix	W	W	W	Swartwout	W
W	W	2 W	CE	W	W	Atw'd-Morrill	Bendix	W	W	W	Vickers	W
B&W	B & W	2 CE	CE	W	Crane	Atw'd-Morrill	Bendix	W	W	W	Vickers	W
W	B & W	2 W	CE	W	Crane	Atw'd-Morrill	Bendix	W	W	W	W	W
W	B & W	2 B & W	FW	W	Crane	Atw'd-Morrill	Marvel-Schebler	Curtiss-Wright	W	W	W	W
2 M&C	2 CE	4 CE	2 B & W	W	Crane	Walworth	Marvel-Schebler	GE	Dumont	GE	GE	GE
W	B & W	2 W	CE	W	Crane	Atw'd-Morrill	Bendix	W	W	W	W	W
W	B & W	2 FW	FW	W	Crane	Atw'd-Morrill	Marvel-Schebler	Curtiss-Wright	W	W	W	GE
W	B & W	2 FW	FW	W	Crane	Atw'd-Morrill	Marvel-Schebler	Aerojet-General	W	W	W	GE
CE	B & W	2 FW	FW	W	Crane	Atw'd-Morrill	Marvel-Schebler	Aerojet-General	W	W	W	GE
M&C	B & W	2 CE	FW	W	Crane	Atw'd-Morrill	Marvel-Schebler	Aerojet-General	W	W	W	GE
OM	B & W	2 CE	FW	W	Crane	Atw'd-Morrill	Marvel-Schebler	Aerojet-General	W	W	W	GE
CE	B & W	2 FW	FW	W	Crane	Atw'd-Morrill	Marvel-Schebler	Aerojet-General	W	W	W	GE
W	B & W	2 CE	FW	W	Crane	Atw'd-Morrill	Thompson	Aerojet-General	Daystrom	Consol.	W	W
OM	CE	2 CE	FW	W	Crane	Atw'd-Morrill	Thompson	W	Daystrom	Consol.	W	W
OM	B & W	2 CE	CE	W	Crane	Atw'd-Morrill	Thompson	W	Daystrom	Consol.	W	W
CE	CE	2 CE	Alco	W	Crane	Atw'd-Morrill	Marvel-Schebler	GE	W	W	W	W
M&C	B & W	2 FW	FW	W	Crane	Atw'd-Morrill	Marvel-Schebler	Curtiss-Wright	Daystrom	W	Vickers	GE
CE	B & W	2 FW	FW	W	Crane	Atw'd-Morrill	Marvel-Schebler	Curtiss-Wright	Daystrom	W	Vickers	GE
M&C	B & W	2 FW	FW	W	Crane	Atw'd-Morrill	Marvel-Schebler	Curtiss-Wright	Daystrom	W	W	GE
M&C	B & W	2 FW	FW	W	Crane	Atw'd-Morrill	Marvel-Schebler	Curtiss-Wright	Daystrom	W	W	GE
B&W	B & W	2 CE	FW	W	Crane	Atw'd-Morrill	Marvel-Schebler	Curtiss-Wright	Daystrom	W	W	GE
B&W	B & W	2 B & W	CE	W	Crane	Atw'd-Morrill	Thompson	W	W	Consol.	W	GE
B&W	CE	2 B & W	FW	W	Crane	Atw'd-Morrill	Vard	W	W	Consol.	W	GE
B&W	B & W	2 B & W	Alco	W	Crane	Atw'd-Morrill	Vard	W	W	Consol.	W	GE
OM	CE	2 B & W	CE	W	Darling	Atw'd-Morrill	Marvel-Schebler	W	W	W	W	DeLaval
OM	CE	2 B & W	Alco	W	Crane	Atw'd-Morrill	Marvel-Schebler	Consol.	W	W	W	W
OM	B & W	2 B & W	FW	W	Crane	Atw'd-Morrill	Marvel-Schebler	Consol.	W	Vickers	W	GE
OM	B & W	2 B & W	CE	GE	Crane	Atw'd-Morrill	Marvel-Schebler	Curtiss-Wright	W	Vickers	W	W
B&W	B & W	2 B & W	CE	GE	Crane	Atw'd-Morrill	Marvel-Schebler	Curtiss-Wright	W	W	W	GE
B&W	B & W	2 B & W	CE	GE	Crane	Atw'd-Morrill	Marvel-Schebler	W	W	W	W	W
OM	A. O. Smith	2 B & W	FW		Crane	Atw'd-Morrill	Marvel-Schebler					
	B & W	2 B & W	FW		Crane	Atw'd-Morrill	Marvel-Schebler					
	CE	2 FW	FW		Crane	Atw'd-Morrill						
	CE	2 A. O. Smith	FW		Crane	Atw'd-Morrill						
B&W	B&W	2 FW	Alco	W	Crane	Atw'd-Morrill	Marvel-Schebler	W	W		W	GE
B&W	CE	2 FW	Alco	W	Crane	Atw'd-Morrill	Marvel-Schebler	W	Consol.		W	GE
M&C	CE	2 B&W	Alco	W	W	Atw'd-Morrill	Marvel-Schebler	W	Consol.		W	W
M&C	CE	2 B & W	Alco	W	W	Atw'd-Morrill	Bendix	W	W		W	W
M&C	B & W	2 B & W	Alco	W	W	Atw'd-Morrill		W	W		Vickers	DeLaval
	B & W	2 FW	FW		W	Atw'd-Morrill						
OM	B & W	2 FW	Alco		W	Atw'd-Morrill						
OM	B & W	2 FW	Alco		W	Atw'd-Morrill						
OM	B & W	2 FW	Alco		Crane	Atw'd-Morrill						
OM	B & W	2 FW	FW		Crane	Atw'd-Morrill						
OM	B & W	2 FW	FW		Crane	Atw'd-Morrill						
2 W	2 CE	8 FW	2 Alco	GE	Crane, Chapman	Hammel-Dahl	Bendix	Ward-Leonard	W	W	GE	2 GE
4 OM, 2 W, 2 M&C	2 FW, 6 CE	16 W, 10 FW	4 FW, 4 Alco	16 GE, 16 W	32 Crane, 32 W	32 Atwood-Morrill	United Shoe, Vard	W	W	Vickers	GE	8 W
2 OM	2 CE	6 FW	2 Alco	W	Crane	Atw'd-Morrill	United Shoe	GE	Bendix	Consol., W	W	2 GE
No data yet												

No data yet on contract awards for ships being funded by Congress this summer

Navy reactor designations have one letter indicating type of vessel (S = submarine, A = aircraft carrier, C = cruiser, D = destroyer-leader [frigate]), one number indicating the order of construction of the reactor type, and one letter for the manufacturer's initial (W = Westinghouse, G = General Electric, C = Combustion Engineering). **Ship designations** are: SSN = Submarine, nuclear [attack type], SSRN = Submarine, radar-picket, nuclear; SSGN = Submarine, guided-missile, nuclear; SSBN = Submarine, ballistic-missile, nuclear; CGN = Cruiser, guided-missile, nuclear; CVAN = Aircraft Carrier, attack, nuclear; DLGN = Destroyer leader, guided-missile, nuclear

Company abbreviations:

CE = Combustion Engineering
FW = Foster Wheeler
GE = General Electric
M&C = Metals & Controls
OM = Olin Mathieson (now United Nuclear)
W = Westinghouse
Consol. = Consolidated Control Corp.

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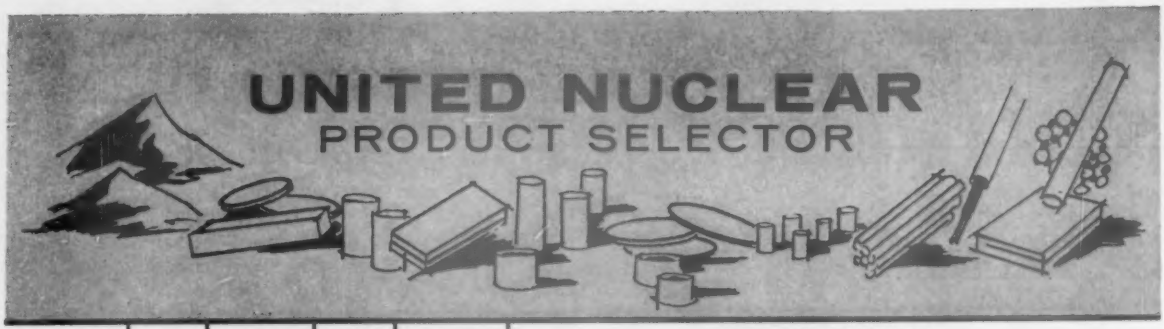
B&W is proud of its part in the Nuclear Navy.

Babcock & Wilcox

The Babcock & Wilcox Company, 161 E. 42nd St., N.Y. 17, N.Y.



	R & D	DESIGN	MFG.	ASSEMBLY	ADDITIONAL INFORMATION
FUEL MATERIALS	✓	✓	✓	✓	Unlimited license as to enrichment or quantity. URANIUM metal, nitride, oxide, carbide, tetrafluoride, trioxide. URANYL fluoride, nitrate, sulphate. URANIUM DIOXIDE ceramic, sintered pellets and other shapes, shot, high fired, special dense. THORIA-URANIA pellets, shot. PLUTONIUM ■ THORIUM ■ OTHER SPECIAL FUELS ■ COLD SCRAP RECOVERY.
ELEMENTS	✓	✓	✓	✓	TUBULAR ■ PLATE ■ ROD ■ CLADDINGS ■ SUPPORTS ■ COLD SCRAP RECOVERY–aluminum, ceramics, cermets, graphite, highly enriched, powder compacts, stainless steel, zirconium, zircalloy.
CORES	✓	✓	✓	✓	ALL COMPONENTS ■ ASSEMBLY ■ SUPPORTING STRUCTURES ■ CONTROL RODS ■ POISONS ■ INSTRUMENTATION ■ RE-LOADS.
REACTORS	✓	✓	✓	✓	SPECIAL PURPOSE–research, engineering test, materials test, low power, mobile compact, fast burst (pulse type).
METALS	✓	✓	✓	✓	FERROUS ■ NON-FERROUS ■ REFRACTORY ■ TOXIC ■ PYROPHORIC ■ SPECIAL SHAPES ■ FABRICATION AND ASSEMBLY to exact customer specifications.
RELATED PRODUCTS AND SERVICES	✓	✓	✓	✓	HEAT TRANSFER SYSTEMS ■ TEST RIGS ■ CONTROL SYSTEMS from single panels to complete process controls. NUCLEAR LABORATORIES AND SERVICES ■ CALCULATIONAL TECHNIQUES ■ TEMPERATURE SHIELDS. RADIATION AND ELECTRONICS SHIELDS (Ray Proof Corp., Stamford, Conn., a United Nuclear subsidiary).

UNITED NUCLEAR
CORPORATION
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Industry Cautiously Considering Private Ownership of Fuels

On May 29, 1961, the Atomic Energy Commission, in announcing new price schedules for uranium, also stated: "The Commission is considering the desirability of recommending amendments to the Atomic Energy Act to eliminate the statutory requirement for Government ownership of special nuclear material. . . . The Commission is also considering what transition measures would be necessary over a period of time if a change were made from Government to private ownership of special nuclear material."

Last month, after an initial period of disbelief that AEC would seriously propose private ownership at this stage in nuclear development, the power-reactor industry was struggling with all of the ramifications of a move toward private fuels ownership and, by and large, wondering how it could be put off as long as possible.

Because of adverse economic overtones, AEC's proposal to begin moving private fuels ownership now was not generally being welcomed. But, because private ownership is considered desirable eventually, both AEC and industry were giving their attention to the transitory steps that might least hurt power reactors economically.

As of last month, AEC was planning to propose to Congress early next year the necessary amendments to the 1954 Atomic Energy Act to permit private ownership and, possibly, certain transition measures that might follow the Act's amendment. "This is certainly our intention," an AEC official declared. However, he explained, "I think we are all convinced that a transition period of a reasonable length is necessary."

Looking toward legislative proposals for the next Congressional session, AEC Commissioner Wilson, Paul A. Fine, chief of the Division of Operations Analysis and Forecasting, and other AEC officials were meeting with industry groups to explore transition measures. Meetings were being held with the Atomic Industrial Forum, Edison Electric Institute, National Association of Railroad and Utility Commissioners, American Public Power Association, AFL–CIO and with other government agencies—with AEC asking for written comments by Nov. 1 so that AEC's staff could lay its recommendations before the Commission by year's end.

AEC Proposals

What was AEC proposing? Two things: 1. changes in the '54 Act to *permit*, rather than *require*, sale of special nuclear materials to private purchasers; and 2. as a corollary of this permission, a flexible program of transition from government to private ownership over a reasonable period. At the end of the period, however, there would be a "free market" in uranium enriched in U-235, plutonium and U-233. "The objective," Fine was writing to interested parties, "would be to provide special nuclear material under financial arrangements that will not impede the development of atomic energy for peaceful purposes but will gradually approach normal commercial procedures for the supply of fuel." And, Fine was indicating, AEC would like to do this by 1971.

What economic impact would "normal commercial procedures" have on nuclear power reactors? People being asked this question were asking in return: "What kind of transition measures will be adopted? For example, what will AEC pay for plutonium produced in civilian power reactors after June 30, 1963?" Thus, it was clear that there were too many unanswered questions last month to permit any realistic forecast of the economic effects of the transition to private ownership.

Some of the things being suggested by AEC as possible transition measures:

- Private ownership, AEC sale, and AEC purchase of special nuclear material would be legally permitted but not legally required and would be subject to implementing actions by AEC.

LATE NEWS: INCENTIVES, NPR, 400-MWE PLANT

A series of significant developments in late October:

Reactor Incentives: AEC sources disclosed that the Commission has put aside, for at least a year, its review of possible new incentives to get more power reactors built; AEC had been expected to propose some type of incentive program at the next session of Congress (NU, June '61, 17). However, this idea was shelved because of the unfavorable mood created in Washington by the controversy over the Hanford New Production Reactor (NU, Oct. '61, 17). AEC officials said incentives may be considered again next year.

NPR Development. Washington State power officials, after meeting with AEC and Bonneville Power representatives, said the state would try to finance and build full generating facilities for NPR (~800 Mwe). Among the steps still to be explored were: whether AEC and Bonneville could legally enter into the necessary arrangements with a state body for use and distribution of NPR's steam; and how the generators coud be financed (bonds were being considered). "We want to act as speedily as possible," said Earl Coe, Washington's director of conservation. "We intend to push it right through. We don't see any stumbling blocks in the road at all, except hurdles of understanding that have to be overcome." NPR power generation was successfully fought at the federal level by the private-utility industry.

400-Mwe Reactor Proposals. General Electric and Westinghouse have submitted preliminary offers to Jersey Central Power & Light Co. on construction of a 400-Mwe power reactor, which industry sources indicated would produce power economically at about 7 mills/kwh. The utility was also considering a fossil-fueled plant and two other alternatives that would not involve a new plant—pumped-storage installations and a high-voltage transmission line from coal fields in Pennsylvania. A decision was due within 6–8 months.

New Argonne Director. Albert V. Crewe, a 34-year-old physicist, will succeed Norman Hilberry as director of Argonne National Laboratory, when he retires next March. Crewe is director of the Particle Accelerator Division at ANL.

• For a few years after June 30, 1963, AEC would agree to provide a market for Pu and U^{233} at prices based on fuel values for various isotopic compositions, determined in relation to the schedule of charges for enriched U (present fuel value is $12/gm and most AEC and industry people were using an arbitrary figure of $9.50/gm as an average fuel value after June 30, 1963).

• After this few-year period of guaranteed purchase by AEC, the Commission would purchase Pu or U^{233} only as needed for government use.

• AEC would have no obligation to purchase enriched U produced in private facilities, such as gas ultracentrifuges.

• Several possible "ownership" arrangements have been suggested by AEC as possible transition measures, including: continued lease until a predetermined date, sale after that date; sale beginning at an early date, with payment in installments; sale at an early date but deferred payment of principal; purchase by licensees through government-guaranteed loans or bonds; purchase with government-guaranteed liquidation of inventory value; purchase by fuel fabricators, banks or specially established corporations which would lease fuel to reactor operators.

• After 1966—preferably not before—AEC might be willing to enrich U owned by licensees (toll enrichment) until commercial enriching and blending services become available.

AEC Illustrates Fuels Ownership Economics

At a recent meeting with the Atomic Industrial Forum (*story this page*), AEC furnished the following chart as illustrating the magnitude of fuel-inventory and other values involved in private ownership of nuclear fuels:

		Fuel costs and credits mills (kwh)		
Reactor	*Average value of U-235 inventory*	*Inventory charge at 4.75%/yr*	*Burnup charge*	*Pu credit at $9.50/gm*
BONUS (16 Mwe)	$1,000,000	0.4	1.3	0.5
Hallam (75 Mwe)	12,600,000	1.1	1.6	0.4
Yankee (136 Mwe)	8,900,000	0.4	1.9	0.8
Dresden (180 Mwe)	5,600,000	0.2	1.0	0.7
So.Cal.Ed. (355 Mwe)	24,500,000	0.4	1.8	0.8

Notes: 1. The U-235 inventory values illustrate that the purchase of these inventories would involve an appreciable increment in plant investment.

2. The inventory lease charges vary not only with reactor size but also with fuel enrichment, neutron economy and a number of other factors.

3. The burnup charge would not be affected by transferring reactor fuel to private ownership. It is shown here simply for comparison purposes.

4. The plutonium credit, as indicated earlier, is subject to a number of factors which cannot today be accurately assessed.

Forum Summary

In early October, the Atomic Industrial Forum released a summary of a Sept. 8 meeting between more than 20 industry officials and eight AEC representatives. Since the meeting, AIF has formed a small committee under the chairmanship of James Pickard, Pickard-Warren-Lowe Associates, to file the Forum's views on fuel ownership with AEC by early or mid-November. In its summary of some of the things discussed at the meeting AIF mentioned several possible effects of a transition to private ownership, as seen by AEC: it might indirectly provide an incentive for private industry to enter the reprocessing business; private work on developing Pu and U^{233} as reactor fuels, and for other applications, might be stimulated; AEC's investment in nuclear fuel would be something considerably less than the $1-billion level forecast for the mid-1970's.

On possible economic impact, the summary had this to say (again based primarily on the AEC presentation at the meeting):

"The economic impact on the cost of nuclear power if reactor fuel had to be purchased rather than leased and if AEC guarantees of Pu and U^{233} buyback were eliminated is difficult to assess. It would vary with the detailed technological design of individual reactor systems and with the detailed financial arrangements adopted by individual reactor operators [*see illustration this page*].

"It is clear, however, that if such policies were put into effect in the near future, they would result in an appreciable rise in the cost of nuclear power. As a benchmark, it appears that the net effect in most instances would be an increase in the cost of nuclear power of 1.0 to 1.5 mills/kwh."

Industry Views

In a speech to the American Mining Congress on Sept. 13, Lyman R. Fink, General Electric's top man on commercial applications of nuclear energy, indirectly commented on the economic impact of private fuels ownership. He did this in discussing the possible importance of only one mill in nuclear-fuel-cycle economics during the 1970's.

"The difference between an all-out effort and a mediocre effort in reducing nuclear energy cost," he said, "can probably amount to as much as one mill averaged over the next 10–15 years. And that one mill—that's right—a hard-earned one mill reduction in total cost of energy from uranium is—I believe—the leverage that can lift 1975 nuclear capacity from 5 or 10 million kilowatts, which should be counted on, to 30 million kilowatts, which can be reached. . . . One mill improvement means 'go' or 'no go,' 'boom' or 'bust,' or in the vernacular of space-age 1961 'A–OK' or abort."

Commenting directly on AEC's proposal for a transition, Fink said that "an orderly transition" of a "prudent, cooperative, deliberate" nature was one of three major steps toward a sound and profitable nuclear power industry. The others, he said, were continued improvement in nuclear economics and technical progress in such areas as high power density and nuclear superheat.

Meanwhile, the American Public Power Association informed AEC on Sept. 22 that it was against private ownership at this time. After a meeting with AEC officials, APPA General Manager Alex Radin wrote to AEC Chairman Glenn T. Seaborg: "We understand that the Commission is exploring the question of permitting private ownership of fissionable materials because of a desire to avoid the development of large government-owned inventories of nuclear fuel and to facilitate the establishment of fuel costs on an unsubsidized basis." However, Radin wrote, APPA "felt that, in view of the present rate of progress toward truly economic nuclear power, the government-owned fuel inventories are not going to become so large during the next 5–10 years as to be an urgent or pressing problem."

APPA also suggested that an evaluation of all forms of government assistance to power reactors might clarify nuclear-power economics more effectively than a switch from lease to sale of reactor fuels.

SPACE REACTORS:
Martin Developing New Series

A leader in the development of radioisotope power generators for outer space, Martin Co., disclosed last month that it was also deep into development of reactor power sources for space—fast, thermionic reactors that would also have nonspace applications. The reactor series has been designated DCR (Direct Conversion Reactor), with three sizes under development—60, 300 and 2,000 kwe.

Martin said it was putting most of its effort into the 300-kwe version because "We think the 300-kwe power range will be . . . in most demand in the 1965–70 time period." The company feels DCR-300 can be developed by 1965, with the proper funding.

The DCR series is characterized by integration of thermionic converter and fuel into sealed modules about 1 in. long by ½ in. dia; the modules are joined in series to make up 10-in. fuel elements of about 1 kwe each. For DCR-300, some 250–260 elements would be arrayed in a core 10 in. long and 10 in. in dia. Cesium vapor is used to neutralize the charge and either lithium, sodium-potassium or potassium would be used as cold-junction coolant. The system would operate at about 1,500°F. For the respective sizes, Martin estimates the following weights per kilowatt (excluding shielding and depending on structural material): DCR-60, 15–16 lb/kwe; DCR-300, 6–8 lb/kwe; and DCR-2,000, 4 lb/kwe or less.

RAMJET REACTOR:
Tory Power Tests Successful

AEC has successfully power tested, for the first time, the nuclear-ramjet test reactor—Tory II A-1. Informed observors said the tests were completely successful and that AEC would proceed late next year with the next step—test of Tory II C-1—with every indication that major technical doubts have been resolved by the recent power tests. The runs were made at the Nevada Test Site on Sept. 28 and Oct. 5.

Power and temperature levels achieved in the two tests were not disclosed by AEC. Its official announcement on the Oct. 5 test read: "The test run, which involved power operation for about one minute at temperatures in excess of 2,000°F, was handled by Lawrence Radiation Laboratory scientists. The power level was classified." An operating ramjet reactor, it is believed, would have a thermal output of several hundred megawatts and operating temperature of more than 3,000°F.

With the clear success of the reactor-development program, the biggest uncertainty for the program continued to be the extent of Air Force support for nonreactor development (NU, Oct. '61, 20). A decision on this is expected this fall.

IAEA:
Eklund In, Soviet Stays

Sigvard Eklund of Sweden, director of reactor development for Sweden's national atomic energy company Atomenergi A.B., and Secretary General of the 1958 Geneva conference, was sworn in as second Director General of the International Atomic Energy Agency Oct. 6, after being confirmed 46–16 (with 6 abstentions) by the Agency's General Conference. The Russians—whose chief delegate, Vasily S. Emelyanov, had threatened to recommend that his country withdraw from IAEA—are apparently staying in.

Eklund succeeds W. Sterling Cole of the U. S. His term of office is four years. Eklund was target of an unusually bitter and vituperative campaign by Russian and Indian delegates, who supported Indonesia's Tjondronegoro Sudjarvo for the top Agency post. Earlier it had been reported that the Russians held Eklund personally in high esteem, opposed him because they felt an Easterner should succeed Cole. However, Emelyanov attacked Eklund personally, sought to cast doubt on his scientific ability. He announced he would walk out of the conference hall before Eklund was sworn in and said Eastern-bloc and Afro-Asian delegations would follow; but when the moment came Emelyanov was the only one to leave his seat.

Eklund made an appeal for sincerity, promised impartial conduct of his office and special attention to the needs of developing countries; he told a press conference he was hopeful of regaining Russian confidence. Emelyanov announced he was resigning his IAEA post—but the Monday following was back at the first meeting of the new Board of Governors. This led to speculation that Moscow disapproved of his extreme attitude.

The General Conference approved next year's program and budget, in a unanimous vote that gave hope the wounds of the anti-Eklund campaign would be healed. The vote also postponed the question of revision of IAEA's statute to an unspecified time. This was seen as highly significant as even the USSR is not now pressing for revision of the Agency's statute.

The new Board of Governors elected Bayir Hussein Hassani of Iraq chairman, and I. H. Usmani of Pakistan and Louis Jánossi of Hungary vice-chairmen.

JCAE STUDY:
Unit Seen as 'Most Powerful'

A 338-page analysis of the role and operating methods of the Joint Committee on Atomic Energy, published last month by George Washington University's National Law Center, describes JCAE as "probably the most powerful committee in the history of the nation . . . in terms of its sustained influence within the Congress, its impact and influence on the Executive, and its accomplishments." It asserts that "there can be little doubt that, had Congress chosen to deal with atomic energy through conventional committees, the history of our atomic energy program would have been quite different. Almost certainly, the national investment in atomic energy would have been substantially less, and our present level of technology considerably less advanced."

On the other hand, the report also warns that "by its skillful employment of statutory powers, the JCAE has made severe and unprecedented inroads" into Executive branch operations, and suggests that further extension of this type of activity could lead to an "end of our traditional checks-and-balances kind of government."

AEC-KY. TRANSFER:
Most Comments Favorable

In the next few months AEC is expected to go through with transfer to Kentucky of certain regulatory authority over nuclear industry there—despite some opposition to this both in industry and within the Commission. AEC also is working on similar transfers to Texas, California, New York and Mississippi, a Commission spokesman said. "We have received four or five comments—all but one fairly favorable," he said. "There hasn't been enough reaction yet to really sway opinions," he said.

Lone industry dissenter on record as of mid-October was Industrial Nucleonics, nuclear-gaging-systems manufacturer from Columbus, Ohio. While agreeing in principle with transfer, the Ohio firm claimed the Commission has failed to assure with certainty that Kentucky's proposed program, first published for comment in September (NU, Oct. '61, 26), will be compatible with AEC's regulation of the same type of activity in other states. Industrial Nucleonics based its objection on the grounds that the agreement as written is lacking in clarity and scope of coverage, and contains several technical difficulties. IN said the present agreement would result in duplication rather than division of responsibility between the state and AEC, as proposed.

Fermi Reactor Must Replace Graphite in Its Neutron Shield

The trouble-dogged Fermi fast breeder reactor is struggling to overcome two new problems from an unexpected quarter. Both this time are of a technical nature.

The more serious one involves growth, deformation and decomposition—under the influence of heat from nonnuclear tests that have been run with 1,000°F sodium—of the graphite forming the neutron shield that lines that reactor cavity just inside the primary shield tank (*see diagram*).

Fermi builder-owner, Power Reactor Development Co., has been reviewing the use of borated graphite in high-temperature shielding. This relatively new product exhibits characteristics involving heat resistivity and oxidation that may make it necessary to change the environment in the primary shield tank. Supplier was the Carborundum Co.

Meanwhile all 8,000 ft³ of graphite in the original neutron shield is being unstacked—a difficult job because of the extremely cramped space and the high temperature. Holes have been cut in the primary shield tank at various points to give access to the graphite, and a special air conditioner has been installed so that workmen can work despite the primary sodium ambient temperature of 500°F.

The second problem, more routine in nature, is the discovery of some leaky tubes in the No. 2 steam-generator bundle—one of three. It has been sent back to the fabricator, Griscom-Russell, for further study and removal of the tubes. Tests on the other two steam generators are continuing.

The graphite problem is likely to take longer to clear up. It may result in as much as six months' delay in initial criticality for the 100-Mwe fast breeder, which had originally at time of groundbreaking (August 1956) been scheduled for completion in December 1960. However the plant—which for more than a year now has been in the phase of nonnuclear system testing—was beset by more problems, obstacles and hobbles than any other U. S. reactor, including 1. the now celebrated five-year legal challenge to the validity of the AEC construction permit—a case that had to go up to the Supreme Court for a final decision, in favor of PRDC; and 2. failure of the original fuel-rod birdcage design to withstand hydraulic stresses in the sodium coolant, which necessitated re-design and substitute fabrication of birdcage supports (NU, Sept. '60, 21).

Ironically, the latest technical problems have diverted attention from the fact that sufficient fuel is now on hand at the Fermi site to constitute a critical core (NU, Feb. '61, 66). The plant now has on hand in its storage vaults 104 core elements and 510 blanket assemblies (472 outer-row type, 38 inner-row type), enough for startup as soon as the neutron shield and steam generator corrections have been completed and fuel loading approved.

On the Paperwork Front

On the administrative front, PRDC has filed the last section of the hazards summary report and is awaiting review of it by the Advisory Committee on Reactor Safeguards.

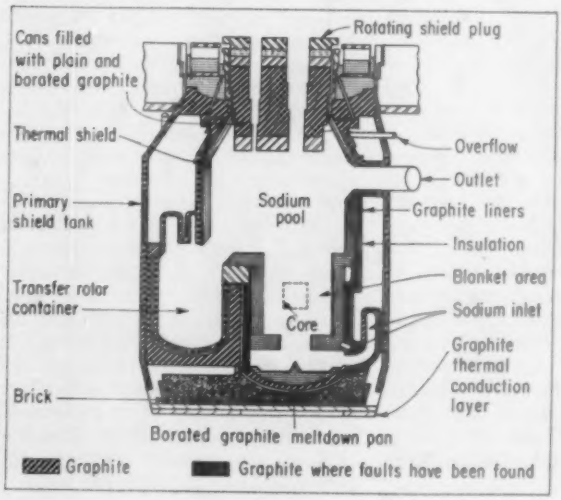
The Circuit Court of Appeals, carrying out the Supreme Court instructions, has completely confirmed AEC's original order granting the Fermi construction permit and has vacated its own adverse judgment of June 10, 1960. This apparently closes the docket finally—once and for all—on the five-year history of litigation over the validity of the permit, and leaves only the question of grant of an operating license as a possible field for further union opposition to startup of the $85-million nuclear power plant.

The three labor unions that fought the construction permit so long and so assiduously are still not saying, however, whether or not they will oppose the operating license. One clue to their intentions may lie in the behind-the-scenes fight the unions are waging against an AEC-requested bill to eliminate mandatory hearings before AEC on final reactor operating-license requests. One union official, in giving the reason for union objections to the bill, declared that it chips away at over-all public safety guarantees now built into the atomic energy act. "Walter Reuther, for one," the official said, "is still very much concerned over whether the reactor will operate safely, but of course as long as PRDC keeps postponing the construction completion date, at least we don't have to worry about the plant's operation." AEC earlier this year approved a six-month extension of the completion date from June 15 to December 15, 1961, asked by PRDC.

Fermi Finances

Latest cost figures for Fermi show:

Direct & indirect plant costs including non-nuclear testing	$41,770,617
Fuel fabrication	3,750,000
Research & dev'pment	23,365,854
	68,886,471
Detroit Edison-funded turbine-generator	17,000,000
Total	$85,886,471



REACTOR CROSS-SECTION (left) shows areas where plain and borated graphite has been used for neutron shielding. Black areas indicate regions where graphite deterioration has been found. The heavy diagonals areas indicate graphite that has absorbed moisture that will have to be removed, dried and re-stacked. Orders for replacement graphite are being studied, have not yet been awarded. National Carbon Co., Battelle Memorial Institute and Detroit Edison are making studies for PRDC on stability of borated graphite at high temperatures.

CLOSE-UP (right) of reactor neutron shield shows how lagging covering graphite has been pushed out as result of graphite growth. Lagging covers graphite liners shown in diagram in black

Fallout-Detection, -Protection Programs Accelerated

Increasing government emphasis on the procurement and development of radiological-monitoring instruments—in the form of newly authorized civil defense funds—has resulted from the general excitement over fallout. Effort to improve the quality of existing instruments and to perfect new, more effective devices is being directed primarily by the Defense Department's Office of Civil Defense at Battle Creek, Mich. Battle Creek OCD is working with industry contractors to develop instruments for use by mobile monitoring teams operating as part of a nationwide network and instruments for use as personnel-type monitors ("citizens instruments").

Two recent developments have added impetus to the acceleration: 1. a reorganization in national civil defense organization, culminated in late September by the swearing in of Stuart Pittman to the newly created post of Assistant Secretary of Defense for Civil Defense (NU Wk, 21 Sept. '61, 6) and 2. a major August increase in the civil defense budget which raised from $60-million to approximately $294-million the amount to be spent on civil defense in fiscal '62. $207.6-million will be spent by Defense's Office of Civil Defense and $86.5-million by the Office of Emergency Planning (OEP), organized in August to assume the policy, planning and coordination functions of the Office of Civil and Defense Mobilization (OCDM) which has been absorbed by Defense.

$9.3-million of this total has been set aside for purchase of radiation detection instruments that will be used primarily in a 4-year program begun in 1960 to set up and equip 150,000 manned monitoring stations (144,000 state and local, 6,000 federal) throughout the country. Each station will be supplied with one set of monitoring equipment, costing $78, and consisting of one G–M counter, two survey meters, two dosimeters and one dosimeter charger per set (NU Wk, 7 Sept. '61, 4). OCD, which spent $15-million to initiate the program and will spend another $25.5-million to complete it, has established 47,000 stations thus far and hopes for 100% completion by late '63.

Then, starting in '64, Defense/OCD hopes to provide an additional set for use by mobile units at each station. Additional cost: $11.2-million.

Remainder of the $9.3-million will be applied toward purchase of 4 million dosimeters ($4.50 each) that Defense hopes to provide for its civil defense workers in decontamination and rescue work.

In addition, Defense will spend $13.5-million of its $207.6-million civil-defense allocation for research-development work, some to develop team-monitoring and personal-type equipment. Defense's OCD at Battle Creek, Michigan, has reported that it is spending $100,000 a year in an attempt to develop new instruments and improve devices already existing and that it has a 40-project backlog. Prime contractors are Bendix, Victoreen, Lionel, Randam, and Naval Research Laboratory, and Oak Ridge National Laboratory.

Portable Survey Meter

Successful projects have been completed thus far by Victoreen, Lionel and Bendix. Victoreen has developed a portable survey meter with an ion chamber detector having four decades of range (0–0.5, 0–5, 0–50, 0–500 r/hr) that is accurate to ±15% in detecting beta and gamma radiation. It also has successfully developed a quartz-fiber dosimeter with built-in solid state battery-charging device that can detect radiation dose in the 0–20 roentgen range with ±10% accuracy.

Lionel has succesfully developed a transistor-type, portable dose-rate meter powered by two "D" batteries that uses a G–M detector for gamma radiation in the 1–100 r/hr range with accuracy of ±35%. Lionel is also working to develop a similar portable dose-rate meter that can be incorporated in portable broadcast receivers, and a transportable calibration unit using approximately 100 curies of Cs-137 for calibrating dosimeters and survey meters to 400 r/hr.

The other successful contractor, Bendix, has developed a quartz-fiber dosimeter with built-in piezoelectric charging device that detects radiation dose in the 0–20 roentgen range with ±10% accuracy. In addition, Bendix is marketing (with OCD approval) a three-piece set of "citizens" instruments retailing at $24.95 that consists of its quartz fiber dosimeter, a personal rate meter that can register from 0–120 r/hr and a dosimeter-ratemeter charger. Bendix is also trying to develop a portable survey meter and a dose-rate meter.

Randam of Cincinnati is trying to perfect a G–M instrument with attached loudspeaker as a training aid for classroom instruction.

Unmanned System

One OCD contractor, Dresser Industries Electronics division of Houston, is working on another concept—an unmanned radiological monitoring device that would detect gamma radiation in the 1–1,000 r/hr range. Dresser is concentrating on a low-cost device for intracity systems that would be tied-in with communication systems for rapid transmission of information to an OCD control post, where it would be evaluated.

While industry has been working for a share of the monitoring-instrument dollar, Oak Ridge National Laboratory has been working on two projects: 1. development of a remote-reading shelter meter to detect gamma radiation in the 1–1,000 r/hr range with ±20% accuracy. It would operate on a 12-volt battery and have an external probe connected to an internal indicator by a 200-ft cable.

2. Oak Ridge is working to modify an aerial survey meter for use in low flying aircraft. It consists of three G–M detectors sensitive in the 0–0.1-, 0–1- and 0–10-r/hr range with ±20% accuracy.

A final OCD contractor, Naval Research Laboratory, is working to improve solid-state detectors for possible application in dose-rate meters that would be used to detect gamma radiation.

The major portion of the civil-defense budget—$169.3-million—will be used in the shelter program. Included are: 1. $93-million for a shelter survey that will attempt to determine how much shelter space is available in existing buildings. 2. $58.8-million to stock shelters with food, water and other necessary supplies. 3. $10-million to improve already-existing shelters. 4. $7.5-million to plan and construct fallout shelters in new Federal buildings.

In addition to funds for equipment purchases, research-development and the shelter program, the budget also provides funds for work on two other projects: 1. continued $10-million research-development program on the $50-million National Emergency Alarm Repeater (NEAR) home warning system; and 2. a $5.5-million program to correct present communications deficiencies.

NUDETS Network

While the NEAR concept is relatively advanced, the Air Force, through the Electronics Systems Division (ESD) of its Systems Command (Hanscom Field, Bedford, Mass.), intends to develop a system—NUDETS—to pinpoint the location of nuclear

detonations, and to disclose detailed blast characteristics (yield, height, etc.)—before explosions destroy the instruments. EDS has received 13 proposals from industry for construction of a prototype system (NU Wk, 5 Oct. '61, 2). The Air Force was expected to select a prime contractor in November.

Backing up the Defense Department in its civil-defense program is the U. S. Public Health Service. Public Health has several monitoring networks that it is "beefing up." Most important is the Radiation Surveillance Network, whose stations are now being increased in number from 45 in 39 states to provide adequate coverage for *all* states. These stations take measurements of gross beta dose rates from samples gathered, then forward the samples to Public Health's Rockville, Md., laboratory for further analysis. If significant radiation dose rates are discovered, then further, more intensive, investigations are undertaken in suspect areas to determine possible harmful effects on local food and water supplies. In addition ten of the surveillance stations are being equipped with special apparatus to give better estimates of the amount of I-131 in the air.

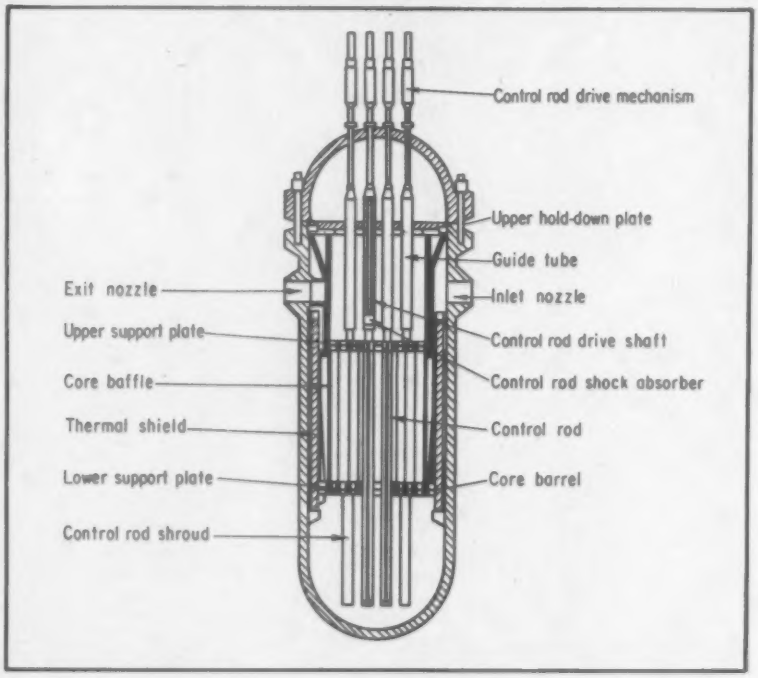
Other Public Health networks include 1. a 103-station network of air pollution monitoring stations which perform routine studies of gross beta levels in air samples. 2. milk monitoring network of milk "sheds" located in 60 major metropolitan areas. Supplementing these are six basic milk analysis stations equipped to conduct special studies to trace radiation sources back to "the grass roots." In Public Health's stepped up program, six of the 60 milk-sampling stations now are taking samples every day instead of monthly. 3. a water-quality network to determine the possible existence of water pollution in important inland water bodies.

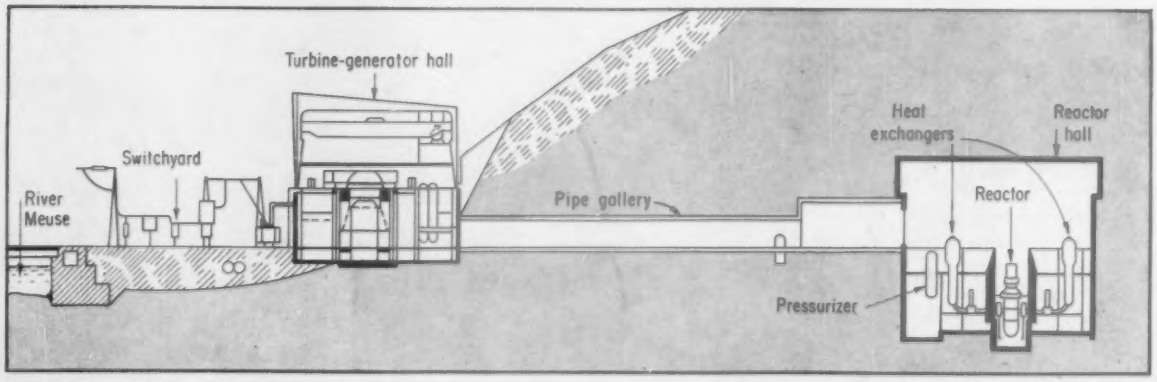
In addition night shifts have been added at some stations, and the Service's budget has been increased. Public Health also is issuing a manual, "Radiation Protection Guides," that provides information on radiation levels for all dangerous radioactive fallout materials. In general, Public Health is expanding its fallout-detection-network program, hoping to speed efforts to determine whether significant health hazards are present or can be expected from Russia's current series of atmospheric nuclear-weapons tests.

SENA Discloses Details of 242-Mwe Westinghouse Reactor

SENA, the Franco-Belgian utility combine, last month disclosed the following details of its pressurized-water reactor (*see p. 45*). Westinghouse and its French and Belgian licensees will build the plant.

POWER RATINGS	
Reactor heat output	825 Mwth
Elec. output, gross	258 Mwe
Elec. output, net	242 Mwe
Station efficiency	29.3%
PRIMARY CIRCUIT (four loops)	
Coolant pressure	2,150 psia
Coolant temperature inlet, 514°F; outlet, 572°F	
REACTOR VESSEL	
Length over-all	39 ft
Inside diameter	10 ft
Wall thickness	9 in.
Stainless cladding inside wall	0.23 in.
Weight, vessel alone, emtpy	275 tons
Weight, in service	583 tons
FUEL	
Material	UO_2 in pellets in rod bundles
Enrichment	3.1%
Cladding	stainless steel tubes
Total loading, uranium	50 tons
No. of fuel elements	120
Average burnup	14,700 Mwd/tonne
Reloading	By zones of 40 elements, with transfers toward center
COMPONENTS	
Primary piping diameter	23.6 in.
Pump capacity	24,000 gpm
Heat exchangers	one per loop
Heat exchange surface	13,500 ft²
Steam conditions at throttle	465 psia, 462°F





Fuel Elements Pace Rise in '60 Industry Shipments, Orders

An 18% rise in 1960 shipments of key U. S. nuclear industry products over '59 totals—from $242-million to $285.6-million—was highlighted by an increase in shipments of complete reactor fuel elements and control rods, particularly those for use in naval reactors, according to a report recently released by the U. S. Census Bureau. Shipments* of these items rose from $54.8-million in 1959 to $81.1-million in 1960. This increase more than offset decreases in shipments of primary vessels and tanks, down from $19.9-million to $11.8-million; heat exchangers and condensers, which dropped from $27.2-million to $19-million; and valves, off from $13.9-million to $8.3-million in 1960.

Helping counter the decreases were significant increases in shipments of reactor control-rod-drive mechanisms, which rose from $5.4-million to $16.2-million; reactors, up from $7.4-million to $12.3-million; commercial irradiation services and conversion of enriched uranium, increased from $5.9-million to $11.2-million; shielding, from $1.7-million to $5.7-million; and radiation detection and monitoring devices, which rose from $26-million to $30.9-million. Slight increases were also noted in other items shipped, including accessory reactor control instrumentation, pumps, partially fabricated fuel element materials and control rods not shipped directly for reactor installation, and other specialized reactor components and equipment.

In addition, the Census report listed—for the first time—the following 1960 net orders for immediate or future delivery: complete reactor fuel elements and control rods shipped directly for reactor use—$36.5-million; heat exchangers and condensers—$10.9-million; valves—$9.3-million; reactor control-rod-drive mechanisms and components—$8.5-million; reactors—$7.7-million; and primary vessels and tanks—$7-million.

Data were obtained from all known U. S. manufacturers of nuclear products. Census Bureau officials responsible for the survey believe it provides complete coverage; the census is four years old.

* Including exports and shipments to U. S. government agencies.

Value of Shipments of Atomic Energy Products: 1958–1960

(In thousands of dollars)

Product	1960 Total	1960 U. S. Government agencies	1960 Other, including export	1959 Total	1959 U. S. Government agencies	1959 Other, including export	1958 Total	1958 U. S. Government agencies	1958 Other, including export
TOTAL	285,647			*242,009			161,762		
Nuclear reactors	12,389	†	†	7,497	†	†	1,156		1,156
Reactor components and equipment:									
Primary vessels and tanks	11,873	10,064	1,809	19,989	†	†	17,099	13,325	3,774
Control rod drive mechanisms and components‡	16,227	12,861	3,366	5,404	4,766	638	7,481	6,969	512
Accessory instrumentation for reactor control	17,668	11,388	6,280	15,933	11,311	4,622	15,284	12,326	2,958
Heat exchangers and condensers§	19,019	11,932	7,087	27,233	22,903	4,330	13,799	7,358	6,441
Pressurizers, components, and auxiliary equipment¶	2,034	†	†	3,620	†	†	1,758	†	†
Pumps	21,390	†	†	19,455	†	†	9,516	7,861	1,655
Valves	8,319	6,977	1,342	13,984	12,207	1,777	11,401	7,695	3,706
Fuel handling equipment	1,950	1,011	939	1,747	†	†	‖	‖	‖
Complete reactor fuel elements and control rods shipped directly for installation or use in a reactor**	81,165	73,909	7,256	54,845	†	†	23,873	21,218	2,655
Partially fabricated reactor fuel element materials and control rods not shipped directly for installation or use in a reactor††	14,335	11,116	3,219	11,773	†	†	5,742	3,358	2,384
Core structurals (barrels, cans, boxes, plates, etc., not included above)	4,034	3,483	551	5,255	3,258	1,727	3,908	1,545	2,363
Reactor moderators, coolants, and reflectors§§	3,278	1,669	1,609	§§	§§	§§	§§	§§	§§
Other specialized reactor components and equipment	5,837	3,604	2,233	4,684	*2,068	*2,616	12,935	8,470	4,465
Hot laboratory equipment	4,150	2,764	1,386	*3,689	*2,783	906	3,886	2,900	986
Shielding	5,713	3,066	2,647	*1,797	*1,313	484	‖	‖	‖
Radiation detection and monitoring devices:									
Radiation survey monitoring and control devices	30,904	13,260	17,644	*10,527	*5,829	*4,698	14,799	8,930	5,869
Radiation counting equipment				*15,486	*2,825	*12,661	10,387	2,661	7,726
Radioactive isotopes shipped from plants producing isotopes	982	55	927	*459	*58	*401	171	†	†
Radiation sources and other radioactive materials produced from purchased isotopes	4,152	652	3,500	*3,749	633	*3,116	3,071	403	2,668
Control and measuring devices containing radioactive isotopes	8,946	1,425	7,521	8,897	193	8,704	3,896	136	3,760
Commercial irradiation service	11,282	5,923	5,359	5,986	2,638	3,348	97	†	†
Conversion of enriched uranium metal and compounds (excluding production or conversion of normal and depleted uranium)							1,503	199	1,304

* Revised.
† Withheld to protect individual companies.
‡ Previously "Reactor control rod drive mechanisms."
§ Previously "Heat exchangers."
¶ Previously "Pressurizers."
‖ Included with "Other specialized reactor components and equipment" in 1958.
** Previously "Complete reactor fuel elements shipped directly for installation or use in a reactor."
†† Previously "Partially fabricated fuel materials not shipped directly for use or installation in a reactor."
§§ Included in prior years as part of "Other specialized reactor components and equipment."

REACTOR NEWS

DRESDEN DOWN FOR INSPECTION

Dresden was shut down Oct. 2 on schedule after 63 consecutive days of operation, for an AEC-required inspection of the control rod blades, index tubes and core support plate, which had experienced stress-corrosion cracking problems (NU, May '61, 25). The shutdown is expected to take 6 weeks. The big reactor—most powerful operating in the world today—has generated 731-million kwh since initial startup (119-million this September alone), and has been operating fairly steadily at 192 Mwe (design power is 180), with peaks at 196 Mwe when condenser-water temperature was favorable. Dresden ran at 89% plant factor in August, 92% in Sept.

TWO REACTOR VESSELS INSTALLED

The Humboldt Bay and Sioux Falls reactors had their pressure vessels delivered and installed last month. Humboldt's 115-ton shell was fabricated by Combustion Engineering's Chattanooga works, is 42 ft high, 11 ft in dia, with 4.5-in. walls. The Sioux Falls 65-ton vessel (*photo shows it entering reactor building*) was made by Allis-Chalmers' West Allis works, is 31 ft high, 11 ft dia, with 3-in. walls. Humboldt will operate at 60–75 Mwe with exit steam conditions of 548°F, 1020 psi; Sioux Falls at 66 Mwe, and 825°F, 550 psi steam. Reason for the Humboldt vessel being higher, heavier and thicker for similar power output is that 1. Humboldt, being a natural-circulation reactor, requires a taller vessel; 2. Sioux Falls has an internal superheater, centrally located: thus the vessel walls do not "feel" the superheated-steam conditions.

LITHIUM REACTOR FOR UTILITIES PUSHED

United Aircraft is seeking utility interest in its lithium-cooled high-temperature reactor concept. The Hartford, Conn., firm (parent company of Pratt & Whitney, developer of a lithium-niobium reactor system in its pursuit of an indirect-cycle aircraft reactor plant) has been putting its own funds for at least a year into studying the possibility of harnessing the high efficiency of the lithium reactor for civilian power purposes (NU, April '61, 23). United Aircraft's Research Laboratories are continuing this work as a company-financed project, independently of the contract AEC has given P&W's CANEL (Connecticut Aircraft Nuclear Engine Lab) to build a $13.2-million lithium-cooled reactor experiment (NU, July '61, 28). Several different cycles are under study for use with a possible large commercial lithium power reactor. One that might attain a conversion efficiency of 60% would have lithium-cooled primary with coolant at 2000°F, a molten potassium secondary generating potassium vapor driving a potassium-vapor turbine, the exhaust from which would still be hot enough to make superheated steam in a tertiary loop; both potassium and steam turbines would drive generators. UA has made a presentation on this to the ESADA group, which is understood to have been interested but to have felt that too much development would still be required for a commercial version. Another cycle would use gas in the intermediate loop, with a gas turbine. Also studied: lithium reactors for electrical propulsion in space.

SOUTHERN CAL. REACTOR STALLED

The Southern California Edison reactor project appears stalled for three more months, Congress having adjourned without taking action to make the Camp Pendleton site—on Marine Corps land—available for the 375-Mwe nuclear power plant. "The situation is: status quo," a spokesman for the big utility said. "We will continue to make every effort to acquire the site, but . . . negotiations for [it] will have to go the Congressional route; we know of no other route." With most Joint Committee on Atomic Energy leaders favoring construction of the reactor, speedy action to make the site available had been expected, but the fight over the NPR generators pushed consideration of such action off the calendar. Presumably supporters of the project will move early next year when Congress reconvenes to obtain enactment of the necessary legislation . . . Meanwhile San Diego Gas & Electric Co. has joined Southern California Edison as a 20% partner in the project: SDG&E will pay 20% of the construction and operating costs of the $78-million reactor, and will take 20% of the plant's power output. Joint usage would permit SDG&E to get into the nuclear power field much faster than it could by itself. Location of the Camp Pendleton site midway between San Diego and Los Angeles (So. Calif. Edison's load center) makes SDG&E's participation a logical development.

REACTOR MARKET ACTIVITY

Industry sources last month indicated 1. that current plans at New England Electric System call for ordering a 250–300-Mwe reactor in about a year, and 2. that Consolidated Edison of New York is seriously considering a second reactor at Indian Point. Sponsorship of the New England second reactor has still to be worked out; the plant would go on the line in 1966. Con Ed has been variously reported recently as being uninterested, very interested, or only talking to reactor vendors "to call their bluff" on fixed-price proposals to build units competitive with conventional stations. Westinghouse and General Electric are the leading contenders with both utilities to build the plants, if they are to be built.

COMBUSTION TO MAKE BONUS FUEL

Combustion Engineering was awarded two contracts totaling $900,150 for the fuel for the 16.3-Mwe BONUS (BOiling NUclear Superheat) reactor now about midway in construction at Punta Jiguero, Puerto Rico. Under the contracts, CE will deliver in 11 months 36 superheater elements ($488,200) and 74 boiler elements ($411,950), including 4 superheater and 10 boiler spares. BONUS' central boiler region—64 elements of 64 fuel rods each—will contain a total of 5,600 lb of uranium as 2.4%-enriched UO_2; the peripheral superheater region—32 elements of 32 rods each—will load 3,600 lb of uranium as 3.5%-enriched UO_2. Combustion's subsidiary, General Nuclear Engineering Corp., is nuclear design agent for BONUS, which is scheduled to be completed in December 1962. Containment dome for the $16-million plant is now complete; it will house the entire plant (NU, Aug. '60, 29).

WORLD NEWS

Contract Signed for Ardennes Reactor

Contracts for construction of the 242-Mwe Ardennes reactor near Givet were signed Sept. 25 (NU, Oct. '61, 17) between the Franco-Belgian SENA utility group and a group consisting of Ateliers de Constructions Electriques de Charleroi (ACEC), Metallurgie et Mécanique Nucléaire, Cockerill-Ougrée, Framatome, and Westinghouse. The contracts are subject to final decision by SENA to build the reactor. SENA has not yet decided whether it will need Export-Import Bank financing, but the decision to build under the U. S.–Euratom joint program will depend on the availability, if requested, of all facilities in the program agreement. SENA pointed out in this connection that a reprocessing contract is not yet available and that at least a firm commitment on this from the U. S. AEC or Dept. of State will be required if SENA is to propose under the joint program. Also required is a definition of "fuel inventory." If all facilities promised under the joint program are not available, SENA may decide to continue the project independently without any deadline commitment. As a possible third alternative, SENA still reserves the right to cancel the project entirely. Nevertheless site clearance is continuing: Nov. 17 was set as completion date for the access road through virgin forest to the hole in the mountain in which the reactor is to be located (*see p. 42*) . . . First core for SENA will be fabricated by Westinghouse, under provisions of the new contracts, but Metallurgie et Mécanique Nucléaire, a Belgian firm, will make elements for the second, thus permitting SENA to qualify for an $8-million Euratom subsidy.

Japan Permits Private Ownership of Some Fuels

A mid-September decision by Japan's Atomic Energy Commission to permit private ownership of certain nuclear fuels—natural uranium, depleted uranium and thorium—is expected to spur stiff competition for the domestic manufacture of natural-uranium cores among Japan's four nuclear-industry groups, Sumitomo, Mitsubishi, Fuji and Hitachi. All four are competing for a contract to supply fuel elements for the 159-Mwe Calder-type plant being built by General Electric Co. of Britain, and for JRR-3, the first Japanese domestically manufactured research reactor, which is scheduled to go critical in March, 1962. Three of the groups—Sumitomo, Mitsubishi and Fuji—are competing among themselves to obtain licensing agreements (for the Calder-type reactor and JRR-3) with the U. K. Atomic Energy Agency, which has asked the Japanese government to recommend only one. Nevertheless, the Japanese government is not in a position to make a recommendation unless the three form a joint venture. The decision still prohibits Japanese industry from owning enriched uranium, plutonium and uranium-233.

Westinghouse-Mitsubishi Agreement Validated

A Westinghouse-Mitsubishi technical cross-licensing agreement covering domestic Japanese manufacture of pressurized-water reactors was finally approved by the Japanese government which had withheld sanction while studying national-policy questions involved. The agreement, pending since October, 1959, and in negotiation at least two years prior to that, also covers information on development of other types of reactors and core materials, and is reciprocal. The 15-year agreement calls for initial payment of $1-million, payable in five years, and royalty of 3–4% in accordance with production.

ESSOR Design Team Selected

A French-German team has been selected to design ESSOR, the natural uranium, heavy-water experimental reactor and prototype for ORGEL, the Euratom organic reactor project (NU, April '61, 30). Groupement Atomique Alsacien Atlantique (GAAA), of France, and Interatom, a German company owned 50–50 by Germany's DEMAG and the U. S.'s Atomics International, comprise the winning design team. GAAA and Interatom earlier had completed a preliminary design study for the 25–50-Mwth ESSOR. Meanwhile, Neratom, a Dutch firm, has been awarded a contract for the critical experiment that will precede the reactor.

SENN, SIMEA Groups Purchase Fuel

The largest single order of enriched uranium ever received at Oak Ridge's gaseous diffusion plant—121,370 lb valued at $9-million—was placed by SENN (Società Elettronucleare Nazionale), Italy's utility group building a 150-Mwe General Electric boiling-water reactor on the Garigliano River. The uranium, of two enrichments, will be shipped from Oak Ridge as uranium hexafluoride to the Hematite, Mo., plant of United Nuclear Corp. for conversion to uranium dioxide, then will be fabricated into fuel elements by GE at San Jose, Calif. The enriched uranium became available to SENN under a contract signed with Euratom in late July which formally set the terms for Italian participation in the joint U. S.–Euratom power project (NU, Sept. '61, 29). . . . The SIMEA group, building Italy's 150-Mwe Calder-type reactor at Latina, scheduled to go critical in spring of 1962 (NU Wk, 17 Nov. '60, 5), has reached agreement with the U. K. Atomic Energy Agency on supply of the first 400 tons of fuel at a price estimated at about $15-million. Total weight of a fuel loading for the Latina reactor: 262.5 tons.

Savannah, Lenin Safety Claimed

Four U. S. nuclear-ship experts conferred in Paris early last month with 23 top-ranking European Nuclear Energy Agency experts regarding safety evaluation of NS *Savannah*. The meeting, follow-up to an earlier June ENEA maritime nuclear propulsion meeting, was based on Vols. 1 and 4 of the *Savannah* safety assessment (Engineering and Construction, and Assessment of Hypothetical Accidents). ENEA is expected to issue an advisory memorandum on the outcome of the conference. Concurrent talks are expected to lead to permission for *Savannah* to enter European ports. Meanwhile, a Soviet medical group reported that the icebreaker *Lenin's* first arctic voyage confirmed the "absolute safety" of the ship's three-reactor installation. A group of medical scientists aboard when *Lenin* led a convoy across the Arctic Sea and back last September–November found that the radiation level in the ship's central compartments did not exceed one-tenth of the permissible level; it was even lower in the cabins and other living spaces.

Blin to Head Transuranium Institute

The appointment of France's Jean Blin as head of Euratom's planned Transuranium Institute is expected to speed formulation of plans and policy for the embryo group, hitherto leaderless. As a result, the overdue design order for the institute laboratory, estimated at a $15-million minimum, probably soon will be placed. Completion of the institute, to employ 400 scientists and technicians, is expected in 1963–64.

NEWS IN BRIEF

AEC to Adopt Rules for Shipping Spent Fuel

A regulation specifying criteria and procedures for transporting spent fuel elements has been proposed by AEC. It covers accidental criticality, radiation exposure and the release of fission products during shipment. The proposed regulation, necessitated by the increasing number of reactors going on the line and by the need to refuel some already operating (as Yankee), applies to solid irradiated fuel elements containing 2,000 or more curies of radioactivity that will be shipped in single containers by AEC licensees. Each licensee will be required to obtain Commission approval of cask design and shipping procedures, with specific packaging requirements prescribed for licensees who originate shipments.

Criteria and procedures are based on comments received after AEC first published, on March 17, 1960, a proposed spent-fuel-shipment regulation and comments following an Industry Advisory Conference held May 22, 1961. Major changes made since first publication in March 1960, include 1. revision of the heat-transfer section to insure that under emergency conditions fuel elements will not reach a temperature at which hazardous quantities of fission products would be released to the cask—and possibly the environment; 2. modification of structural integrity criteria to a 15-ft free fall (instead of a 30-ft one) with a specific force that can be applied to satisfy the impact test. (Addition of puncture and fire resistance, pressure design, lid hold-down requirements and the beam type of static load test are believed to provide safety equal to the previously proposed regulation;) 3. permission to use mechanical cooling devices, and to ship under pressure up to 50 psig; 4. addition of a measure of neutron multiplication that can be used to determine the degree of nuclear safety; and 5. several additions, concerning compatibility of materials, contamination limits and canning ruptured elements.

The proposed regulation does not cover methods of fastening casks to vehicles or ships, or the operation of these carriers because these matters are covered by other Federal agencies. It also does not authorize shipments by air because of different possible accident hazards and the excessive weights involved. AEC asked for industry comments by late December.

Congress Appropriates $2.5-billion for AEC in '62

Shortly before adjourning in late September, Congress appropriated $2,547,361,000 for use by AEC in fiscal '62. The appropriation provided a final operating budget for all Commission programs of $2,352,601,000 and a final construction budget of $195,360,000.

Congress did not appropriate money for the following projects, among others: 1. $7-million for unsolicited reaction–construction proposals from private utilities; 2. $5.6-million for a materials–research laboratory at the University of Illinois, apparently because the Illinois state legislature failed to provide supporting funds; and 3. $5-million as a general construction reduction.

Argonne to Build High-Energy-Physics Center

A new $6.9-million high-energy-physics research center will be built to help stage and evaluate experiments in the complex that houses the Zero Gradient Synchrotron, Argonne National Laboratory's 12.5-Bev proton accelerator now being built. Construction of the 10,000-sq-ft laboratory-office building, which will house more than 400 scientists and technicians, is expected to begin in April, 1962, with completion scheduled for August, 1963. Equipment provided will include electronic detectors used to "catch" subnuclear particles resulting from accelerator experiments; detectors, cloud chambers and bubble chambers employed to photograph the paths of these particles; and equipment with photographic emulsions to catch the particles. The center also will have electronics and chemistry laboratories, shops, darkrooms and data–processing rooms and lecture hall.

AEC Appoints Price, Two Others to Regulatory Posts

AEC Chairman Glenn T. Seaborg announced in late September the following appointments: 1. Harold L. Price, formerly acting director of regulation, as director of regulation; 2. Clifford K. Beck, who was assistant director for facilities licensing, as deputy director of regulation; and 3. Robert Lowenstein, from acting director to director of the division of licensing and regulation, succeeding Price.

Price

Beck

Lowenstein

Price and Beck will discharge all Commission licensing-regulatory functions, except those requiring final decision by the hearing examiner or Commission itself, or those involving Commission approval of regulations issuance.

Accident Reports to be Made Public

AEC has decided to make public reports of accidents filed by its licensees. AEC announced the decision to include such reports in its public records in two proposed amendments filed Oct. 4. The amendments apply to regulations that require licensees to submit detailed reports of accidents or radiation incidents. To avoid embarassing any individual by publicly disclosing his exposure to radiation, the proposed amendments state, regulations requiring such reports also are being amended to require licensees to report separately the names of individuals who have been exposed. Provisions of the proposed amendments also apply to licensees operating AEC-owned reactors (as Hallam, Elk River, Piqua, etc.).

Under AEC regulations, licensees must, on request by employees, provide them with periodic reports of their exposure to radiation and must, directly, report to employees any exposure in excess of permissible limits. Excessive-exposure incidents are divided into two categories: **Type A,** which must be reported immediately to the manager of the nearest AEC district operations office, includes exposure of the whole body to at least 25 roentgens, the skin to at least 150 roentgens and the feet, hands or forearms to at least 375 roentgens; **Type B,** which must be reported within 24 hrs, includes whole body exposure to 5 or more roentgens, skin exposure to 30 or more roentgens and extremities' exposure to 75 or more roentgens.

Other distinctions. Type A also includes accidents causing material damage in excess of $100,000 and loss of work of one week or more. Type B includes accidents causing material damage of $1,000 or more and loss of at least one day's work.

Interested parties have until December 3 to submit written comments and suggestions for AEC consideration.

RADIATION NEWS

Martin, Royal Offering Generators at Fixed Prices

Two manufacturers of power generators using radioisotopes as energy sources said last month that they have been offering these generators at fixed prices—less value of the fuel. The firms are the Martin Co. (now Martin-Marietta Corp.) and Royal Research Corp., a subsidiary of Royal Industries Corp. Each of the firms said technology in certain areas of radioisotope-power generation had progressed to the point where they could offer fixed prices on certain types of generators; in each case, the companies said they had made such offers to potential customers interested in large numbers of generators. However, inability to furnish realistic fuel-cost figures for the generators—primarily because of uncertainty over future costs of producing isotopes—continues to be a problem in demonstrating the overall costs of power produced by these devices. Martin has suggested that the best way to clear up the present fuels-cost uncertainty would be a major production program for isotopes used in power generation, thereby assuring adequate supplies at specified prices (NU, Oct. '61, 21).

Monsanto Enters Radiation-Source Business . . .

The growing demand for radiation sources in power and other applications has prompted Monsanto Research Corp. to establish a source-production organization at Dayton, Ohio. Monsanto Research operates AEC's Mound Laboratory, Miamisburgh, Ohio; is the center for radio-chemistry research for its parent firm, Monsanto Chemical Co.; and is also active in other nuclear areas, including a current research-development contract with AEC on organic-reactor coolants and moderators. Pending AEC approval of license applications covering source manufacture, the Dayton lab hopes to go into production before the end of this year of alpha and neutron sources; fission foils from neptunium, uranium and plutonium; and "certain heat sources." The lab's plans also include the canning of alpha and beta emitters and its long-range interest runs to the possibility of getting into fission-product separation.

Initial staff is expected to be about ten men, using a complex of four high-level hot laboratories and related storage and cold-handling facilities. The firm indicated that it would draw on Mound personnel to staff the operation. "The sources laboratory at Dayton," it was pointed out, "is being staffed by men who have pioneered in the production of radioactive sources, who have contributed substantially to the technology of production methods, and who have had many years of experience in the safe handling of nuclear-energy sources."

. . . And Numec Expands Source Manufacture

Nuclear Materials and Equipment Corp., Apollo, Pa., has disclosed that it is expanding its radiation-source production to heat sources for power generators, as well as the neutron sources it has been manufacturing for the last year. Numec has recently been given a government contract to produce classified heat sources of the type, for example, used in the Transit IV-A generator (NU, Aug. '61, 25). The Transit device uses plutonium-238. Numec said it was interested in fabricating essentially three types of sources: neutron (for research, well logging, etc.); heat (fission-product and reactor-manufactured isotopes); and instrumentation (nuclear gages, etc.). It has delivered 70 neutron sources, mostly plutonium-beryllium, and several sources for gaging systems.

AEC to Support Portable Food-Irradiator Studies

As the next major step in the development and procurement of irradiation facilities for the Civilian Food-Irradiation Program, AEC has decided to invite industry proposals on the design of portable irradiators; depending on how long it takes to complete the design phase, AEC may also order its first portable irradiator before the end of this fiscal year (next June 30).

The civilian, low-dose program is managed by AEC's Division of Isotopes Development, which has, in turn, asked Brookhaven National Laboratory to coordinate the portable-irradiation program. BNL designed the first irradiator for this program (a 30,000-curie cobalt-60 unit) and one each of this type of irradiator has already been assigned to Massachusetts Institute of Technology, University of California at Davis and University of Washington. These schools are carrying out research on fish and fruits. The transportable facilities would be used for experimental irradiation of food at or near the points of harvest, primarily to get a feeling for whether and how radiation could be introduced into the normal field-to-market cycle most feasibly.

Two Firms Develop First Detection Instruments

Development of their first radiation-detection instruments has been disclosed by two firms new to this field: Republic Electronics, Inc., Huntington, L. I.; and Continental Electronics Corp., Columbus, Ohio.

Republic. This firm, unrelated to Republic Aviation, has gone into production of a gamma-detection system developed for the Air Force Special Weapons Center, Kirtland AF Base, N. M.; about 400 have been ordered for AF installations at $900 each. The system includes an ionization chamber for fall-out detection of nuclear-weapons blasts, preamplifier and amplifier, read-out meter, strip-chart recorder and flashing-light alarm buzzer. Detection capability is 0.5–1,000 r/hr, on a single scale, with alarms preset for 0.5 r/hr. The detector is battery operated but an advanced version, for operation on normal electrical current, is in development; this would switch to battery operation in an emergency. Republic said it hoped to expand into other nucleonic instrumentation but, if so, it would be for military rather than commercial customers.

Continental. This 10-month-old firm is producing a solid-state, fast-neutron dosimeter—a p-n junction device called a Neutector. The tiny device (⅛ in. dia, ⅛ in. thick) has a cumulative dosage range of 0.1 to 1,000 rads and can be read in a separate instrument without loss of recorded radiation. Anticipated uses include personnel monitoring, reactor-neutron-flux measurement, area monitoring and neutron detection in space (the Air Force is to use one in a space probe); cost of dosimeter is $30, readout instrument, $125. Continental said the company was interested in developing semiconductor-type detectors for other types of radiation but "we can't talk about it at the present time." Its Neutector is marketed through Nuclear Industries, Inc., Valley Stream, L. I., and E. R. Hitchcock & Associates, Washington, D. C.

HVEC, RDI Working on Grain Disinfestation

High Voltage Engineering Corp. and Radiation Dynamics, Inc., have disclosed separate investigations—each firm working with an undisclosed partner—on electron-beam disinfestation of grain. HVEC's effort emphasizes disinfestation of grain for ocean shipment; RDI is more interested in irradiating grain for long-term storage. A major techno-economic problem for both is successful irradiation as grain is shot through a beam at high speed.

NUCLEONICS IN SPACE

SNPO to Buy Nerva Fuel Elements from Industry

The AEC-NASA Space Nuclear Propulsion Office has decided to procure fuel elements for the Nerva program (Nuclear Engine for Rocket Vehicle Application) from private industry. Industry sources estimate that the Nerva fuel-element procurement will rival the naval-reactor program in size, primarily because of the need for testing many configurations in proving out a rocket engine. Government officials said SNPO wanted to begin this year to qualify fuel-element fabricators for Nerva, even though final design of Nerva fuel elements will not be set until some time in 1962. The aim is to achieve the best possible state of fabrication readiness when fuel design has been completed. Westinghouse Astronuclear Laboratory (as the major Nerva subcontractor for the nuclear end of rocket-engine development) has been preparing a procurement program for SNPO and SNPO will move into its qualifying program as Westinghouse completes its task. Presumably the Nerva procurement program will be similar to that for naval reactors, in which as many as five firms have qualified as suppliers.

Meanwhile, SNPO Director Harold B. Finger said in a speech to the 12th International Astronautical Congress meeting at Washington, D. C. in early October that latest estimate for test of the first Kiwi-B reactor was late October or early November. The reactor, Kiwi-B-prime, is the last rocket reactor scheduled for gaseous-hydrogen coolant; the first to use liquid hydrogen is scheduled for test early next year.

AF Division Asks Acceleration of Project Orion

A proposal to accelerate Project Orion—propulsion of a spacecraft via explosion of nuclear devices—has been made to the Air Force by its Space Systems Division, Los Angeles. The proposal would involve: 1. a 3–4-fold increase in the current budget for Orion beginning in fiscal 1963 (present spending level is believed to be about $1-million annually); and 2. the use of nuclear devices for the first time in the three-year-old Orion program. Under the Orion concept, payloads in the thousands and hundreds of thousands of pounds would be sent into space by a series of nuclear devices (less-than-kiloton devices in the atmosphere); devices would be dropped from the craft at 0.1–1-sec intervals, exploding against an ablative-protected plate to push the spacecraft. A major technical problem has been development of a suitable ablative effect that would leave the plate intact. Also, an Orion spacecraft might have to be boosted to 100,000 ft or so by chemical means—to prevent contamination of the atmosphere.

The SSD proposal for acceleration of Orion must be approved by the AF itself, then by Harold Brown, assistant secretary of defense for research and engineering. Project Orion scientists "have come up with a good bit of all the theoretical work [that can be done]," an AF official said, "and now they've got to test out their theories." General Atomic Division of General Dynamics has been the principal AF contractor on Orion.

NASA to Let Flight-Study Contracts on SNAP-8

Three study contracts on flight systems for SNAP-8—the first nuclear electrical propulsion system—are to be let by NASA this fall. The studies would run 6–9 months and, presumably, consider problems of flight-testing SNAP-8 devices beginning in 1965; NASA's goal is to send the first SNAP-8 into space in the spring of 1965 (NU, Apr. '61, 57), with a 60-kw reactor providing power for an arc-jet, ion engine or both of 30 kw each. Latest schedule for meeting this '65 goal calls for: criticality of first SNAP-8 reactor next year; nonnuclear operation of four different 30-kw engines by '63; operation of first complete nuclear electrical system in late '63; completion of 90-day test on a complete system by mid-'64; and flight-test on an Atlas-Centaur rocket vehicle in '65.

NASA Orders 5 Pulse-Height Analyzers from RIDL

Under a contract for $123,483, NASA has ordered five 32-channel pulse-height analyzers from Radiation Instrument Development Laboratory, Melrose Park, Ill., for use in the Mariner series of exploratory shots to Venus and vicinity. First Mariner spacecraft is to be launched in mid-1962 on an Atlas-Agena B rocket. RIDL's analyzers will be used in experiments to detect and count energetic particles from the sun and from outside the solar system. A similar RIDL analyzer has been functioning aboard Explorer XII since Aug. 15, measuring energies of cosmic rays picked up by a scintillation counter; Explorer's deepest penetration into space is 47,800 miles circling the earth every 26 hr, 25 min, and monitoring radiation continuously. The Explorer analyzer weighs 5.1 lb, measures 5 × 6 × 6 in. and consumes 1.5 watts of power.

AF, AEC to Develop SPUR-Type Space Reactor

AEC and Air Force officials disclosed last month that a decision has been made to proceed with development of a space reactor system like the SPUR concept sponsored by AiResearch Division of Garrett Corp. and Aerojet-General Nucleonics (NU, Oct. '61, 28; July '61, 32). The AF will sponsor development of the non-reactor portions of the system and AEC will proceed with development of a liquid-metal reactor for it. The situation was unusual in that the AF had decided to retain AiResearch and AGN (plus Westinghouse Electric Corp.) for non-reactor development but it was not clear how AEC would go about development of the reactor; as of mid-October, this was under negotiation between AEC and AF. Specifically, according to AF sources, AEC has been asked to deveop a reactor capable of performing in the range 100–1,000 kwe.

Informed sources said AEC was expected to take one of three actions: 1. authorize the present SPUR contractors to continue into reactor development; 2. ask AEC contractors already doing similar systems work to take this on (for example, Pratt & Whitney is heavily involved in high-temperature, liquid reactor technology for AEC); or 3. invite proposals from industry generally. SPUR (Space Power Unit, Reactor) is a turbogenerator system (about 2,000°F operating temp.) which would use sodium or lithium in the primary and potassium or another liquid metal in the secondary.

NASA Cuts Budget for High-Temperature Reactors

While the AF and AEC were negotiating development of a high-temperature system (*story above*), NASA's Office of Nuclear Vehicle Applications was finding itself forced to cut its budget for research on high-temperature space reactors. The Office, headed by Harold B. Finger, who also directs the AEC/NASA Space Nuclear Propulsion Office, has been sponsoring research on materials for high-temperature systems (NU, Feb. '61, 82) in the hopes of getting some basic answers before getting into system design. As the result of a Congressional cut in NASA's budget, the Office had to cut the fiscal '62 budget for this effort in half—from about $5-million to between $2–3-million.

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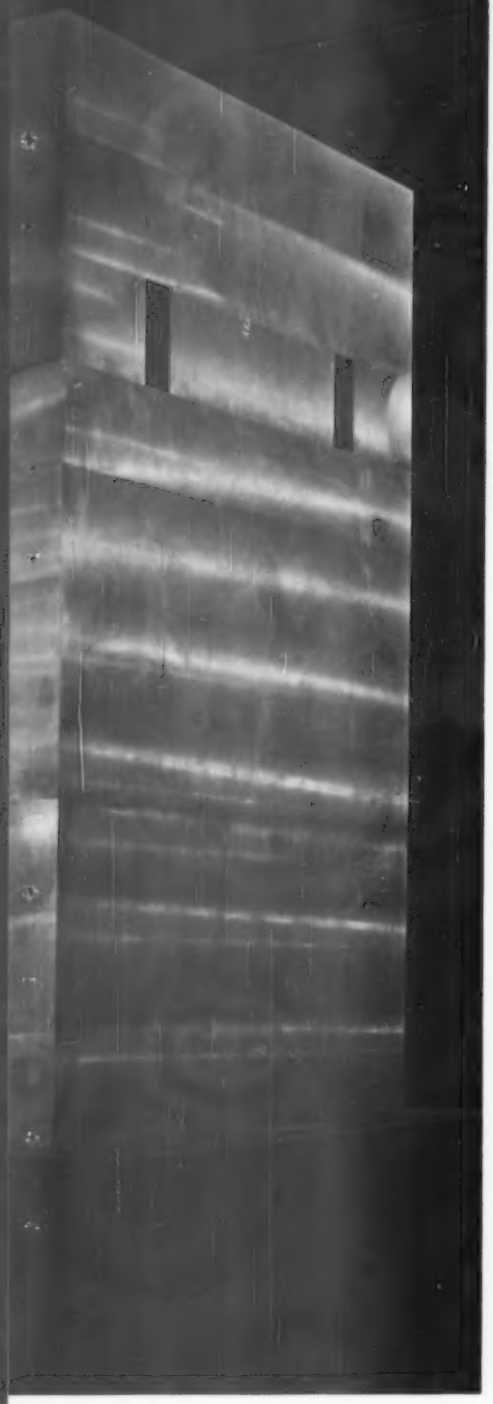

259-ton magnet forgings for new 10^{15} (million billion) particles/second cyclotron

This 88-inch spiral ridge design cyclotron will permit nuclear explorations which heretofore have not been possible. The spiral ridges produce greater phase stability, prevent waste of energy. They keep the particles in focus at the tremendous speeds that are built up.

The beam current (number of particles accelerated in a given time) will be about double that of one world-famous 60-inch cyclotron and about 1,000 times that of the 184-inch synchrocyclotron. Some million billion particles a second will be controlled by the intense, precision magnetic field created by this electromagnet.

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To meet the stability and precision requirements, designers turned to forgings. The USS Quality Forgings seen in the pictures represent about 305 tons of parts that were forged on our 10,000-ton press. After extremely accurate machining the total assembly weighed 258.8 tons.

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No matter what kind or size of USS Quality Forgings you buy, you get the advantages of the finest steel, the most modern equipment and the most skilled forging men in the world. Please address inquiries for our free folder on nuclear forgings to United States Steel, 525 William Penn Place, Pittsburgh 30, Pa.

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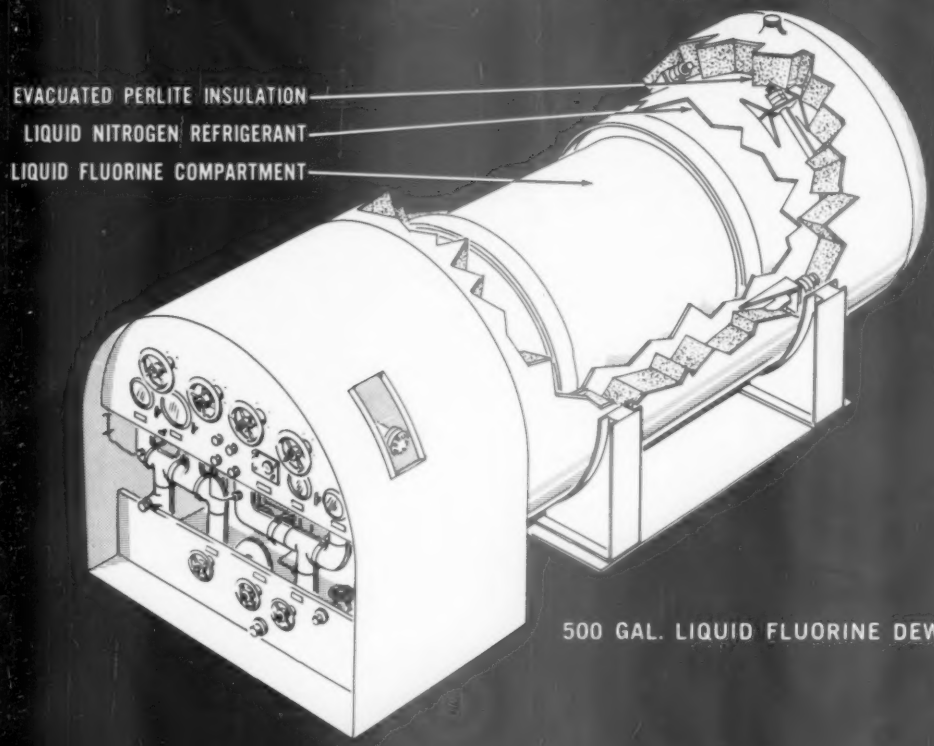

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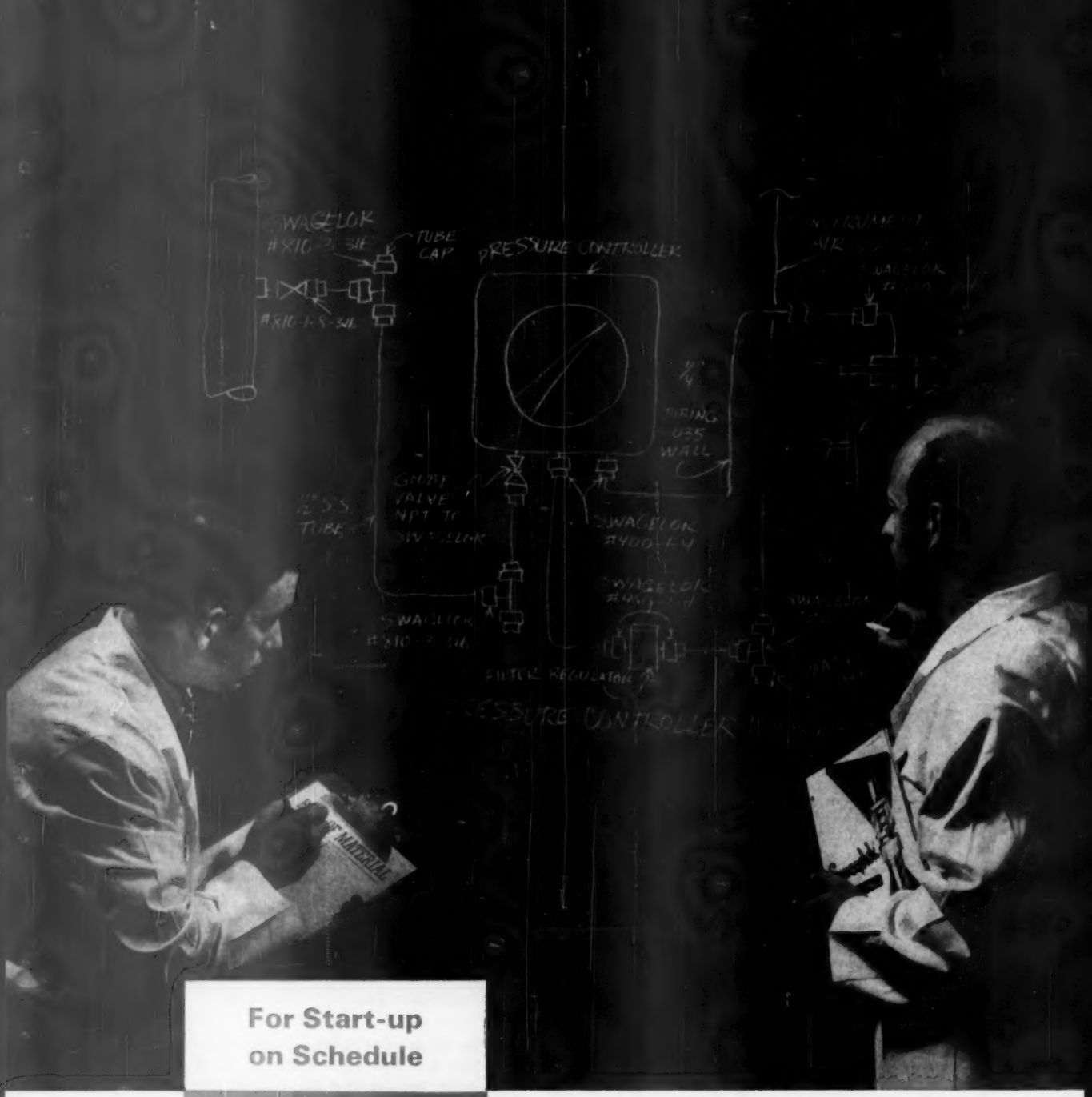

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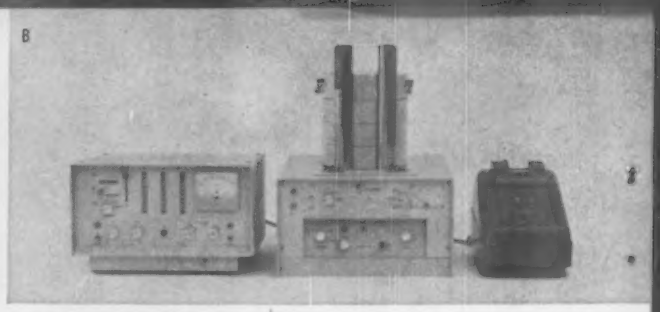

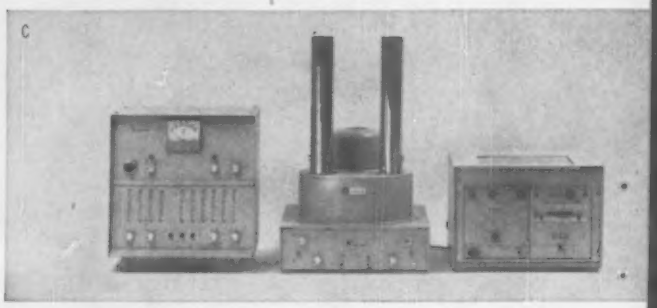

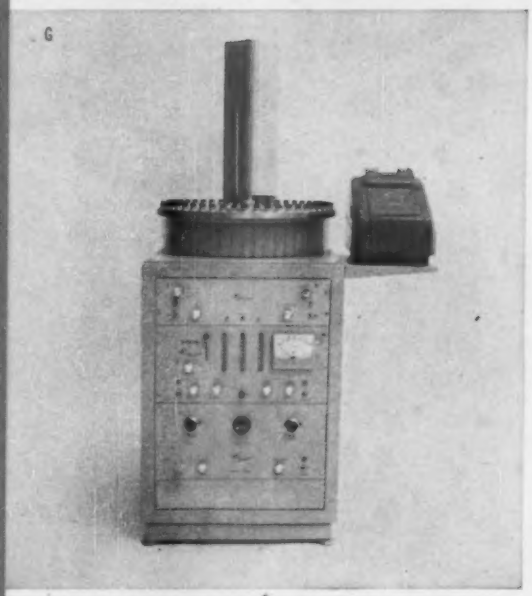

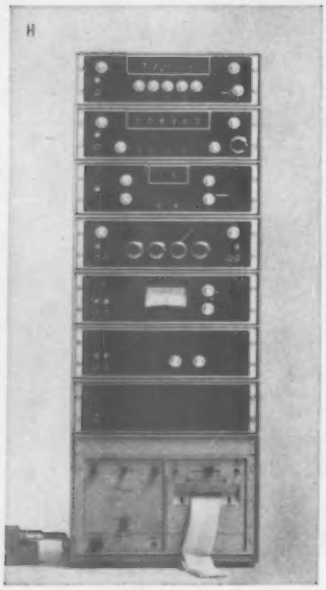

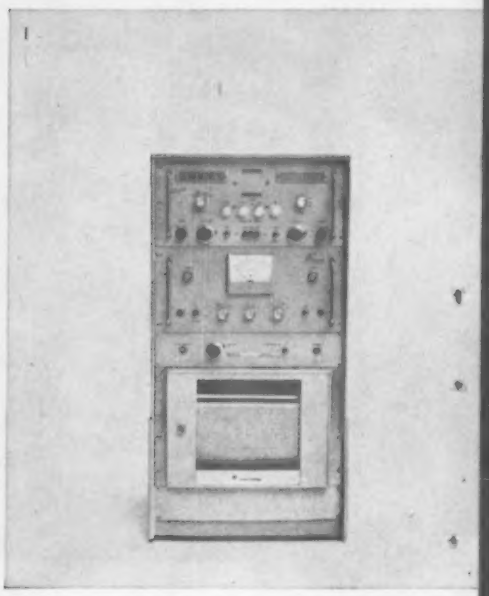

Advanced nuclear instrumentation from Nuclear-Chicago for industry, education, medicine and science

The thirteen systems presented here demonstrate the scope and completeness of Nuclear-Chicago's products for the radioisotope user. They are — instrument by instrument, and system by system — capable of efficient, precise performance with unusual reliability. They are representative of the more than 250 instruments, counting systems, radionuclides and accessories presented in detail in Nuclear-Chicago's new, 96-page general catalog. Please send for your copy — you will find unequalled variety and versatility in the complete Nuclear-Chicago line.

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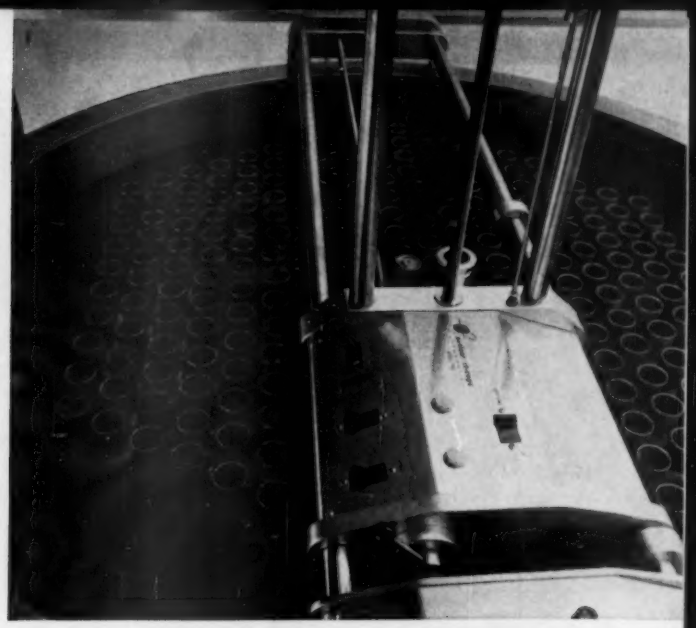
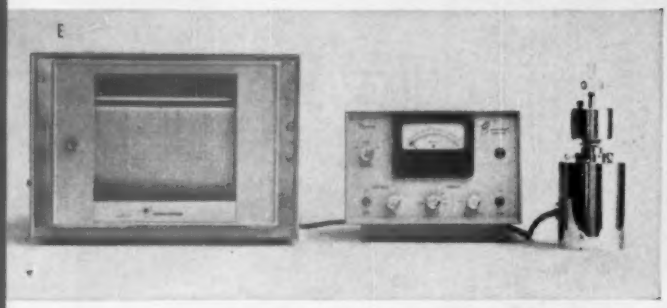
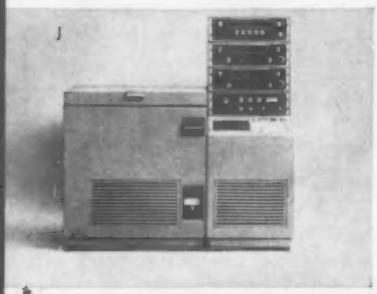
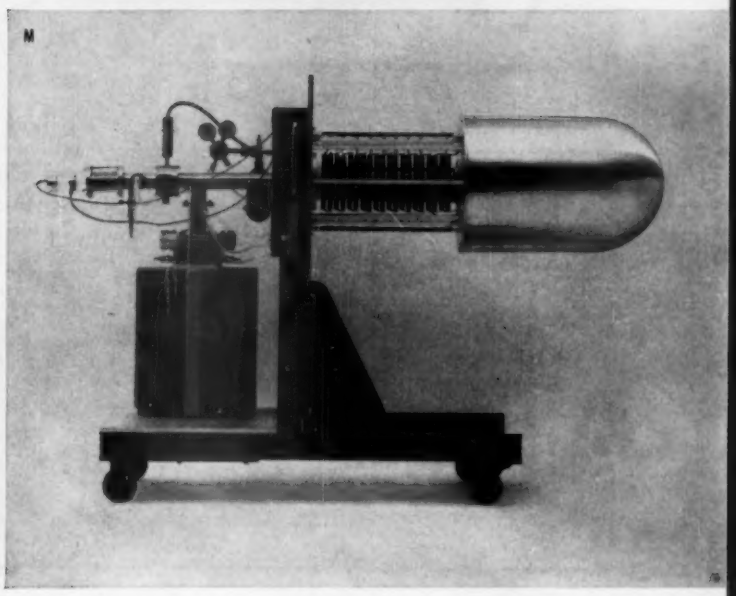
C. C210 Automatic Sample Changer accepts 50 or more beta samples up to 2 in. diameter.









D. C100B Actigraph II® automatically scans strip radiochromatograms.

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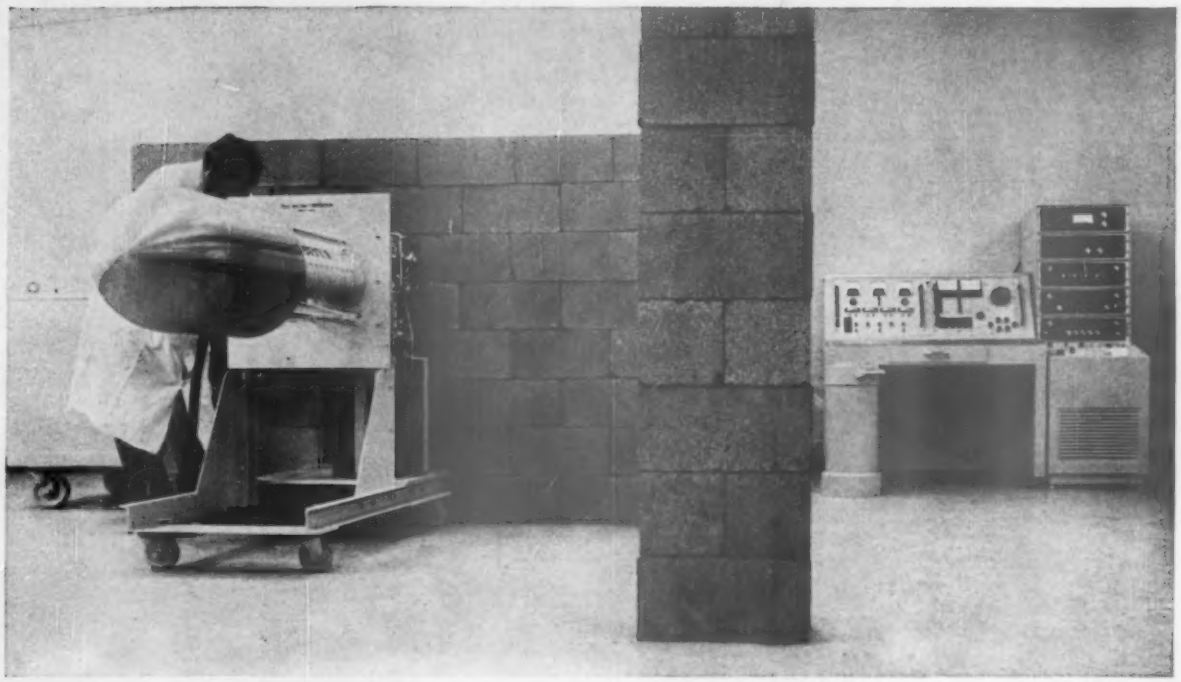

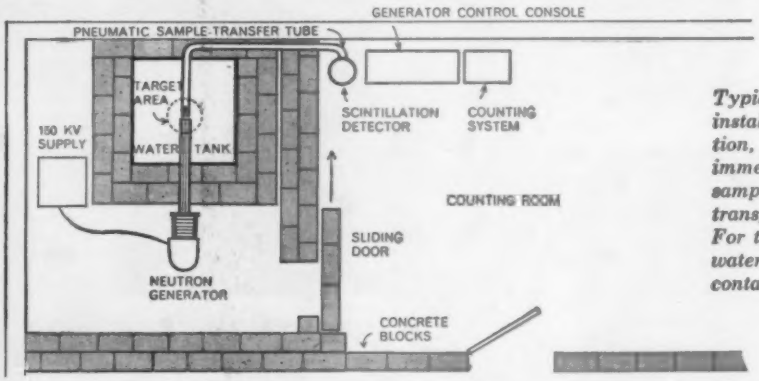

Typical neutron generator/counting installation. For fast-neutron activation, a "dry well" (dotted line) is immersed in the water tank, and the sample contained in the pneumatic transfer tube is suspended in air. For thermal-neutron activation, the water surrounds the pneumatic tube containing the sample.

Two nuclear leaders join to offer the finest neutron generator and instrumentation for activation analysis, research and education

The pooling of resources by Texas Nuclear Corporation and Nuclear-Chicago Corporation brings to the scientific community an expanded, improved source for advanced nuclear systems. An outstanding example is the laboratory shown here which consists of a neutron generator, sample-transfer control, scintillation detector, and counting instrumentation.

The Texas Nuclear neutron generator is a compact, inexpensive system for generating controllable, intense yields of fast and slow neutrons. The instrument produces a fast neutron yield of 4×10^{10} neutrons per second and a thermal flux of 5×10^{8} neutrons per second with an appropriate moderator. The standard Model 9500 accelerator can deliver over 1.0 milliamperes of beam current. The Model 9501 is offered for those applications in which it is desired to pulse the ion beam to obtain neutron bursts of known width, amplitude, and frequency. Both models are equipped with an ion vacuum

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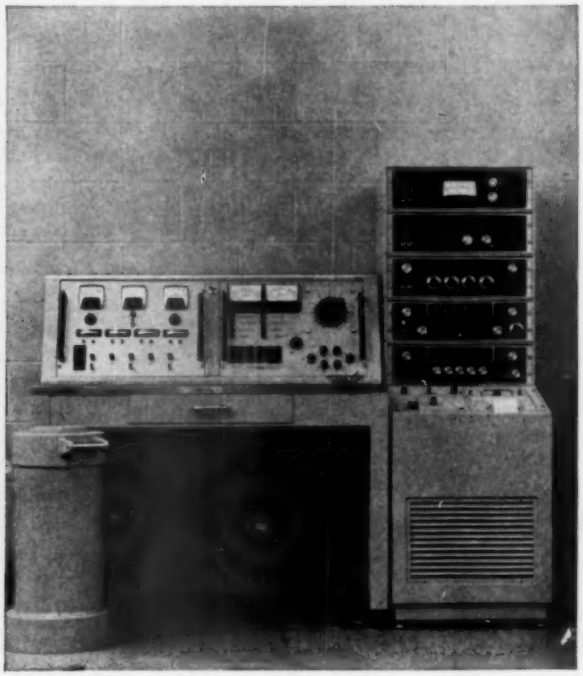
The reliable, low-cost neutron generator is easily and inexpensively maintained. It is simple to operate, small enough to pass through a standard door, and readily installed in a room 10 feet by 10 feet.

Instrumentation for measurement of gamma radiation. At the left of the console is a scintillation detector connected with the target area by the pneumatic sample-transfer tube. At the right is automatic gamma spectrometry instrumentation.



pump. High voltage, vacuum, focus, gas flow, and solenoid supply are controlled from the operator console which is connected to the accelerator by a 33-foot armored cable.

With the neutron generator, Nuclear-Chicago offers (1) a sample-transfer system, (2) a variety of precision scintillation detectors, and (3) a wide choice of counting equipment.

The sample-transfer system is a pneumatically operated device which rapidly moves an irradiated sample from the target area of the generator to the sample-counting position in the scintillation detector. It can also be used to return a sample from the detector to the target area or to introduce a new sample into the neutron flux. Sample irradiation times, sample counting times, transfer times, and delay times are controlled by the operator and are variable over wide ranges. The system allows completely unattended operation when used with the scintillation detector and counting instrumentation shown.

Comprehensive specifications on the Texas Nuclear neutron generator and on Nuclear-Chicago instrumentation for use with the generator, together with descriptions of typical applications, are available upon request. In addition, if you have specific questions relating to your own need for neutron generating equipment, please refer your problem to Nuclear-Chicago. We will promptly forward complete information.

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Nuclide Analysis Associates is pleased to announce the appointment of Boone M. Bowen to head N.A.A.'s Radiological Safety Research Group

Mr. Bowen

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—Installation of environmental monitoring programs, including collection and analysis of samples.

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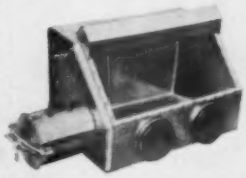
Nuclide Analysis will continue to specialize in the design and fabrication of mass analyzers, and the improvement of mass spectroscopic techniques for the analysis of U, Pu, B, and other important nuclear industry elements, both for purity content and isotopic composition. Newly available, for example, is a tandem 12", 90° spectrometer for analyses requiring very high abundance sensitivity.

We are also pleased to report that increasing order volume has once again caused us to expand. During September, both the main plant at State College and the Boston branch were moved to new locations providing, in all, twice as much space.

For more information on any aspect of N.A.A.'s activities, write P.O. Box 752, State College, Pennsylvania, or call ADams 8-0541.



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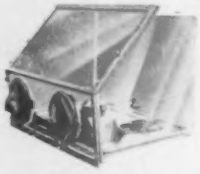

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HARVEY ALUMINUM, Torrance, California.

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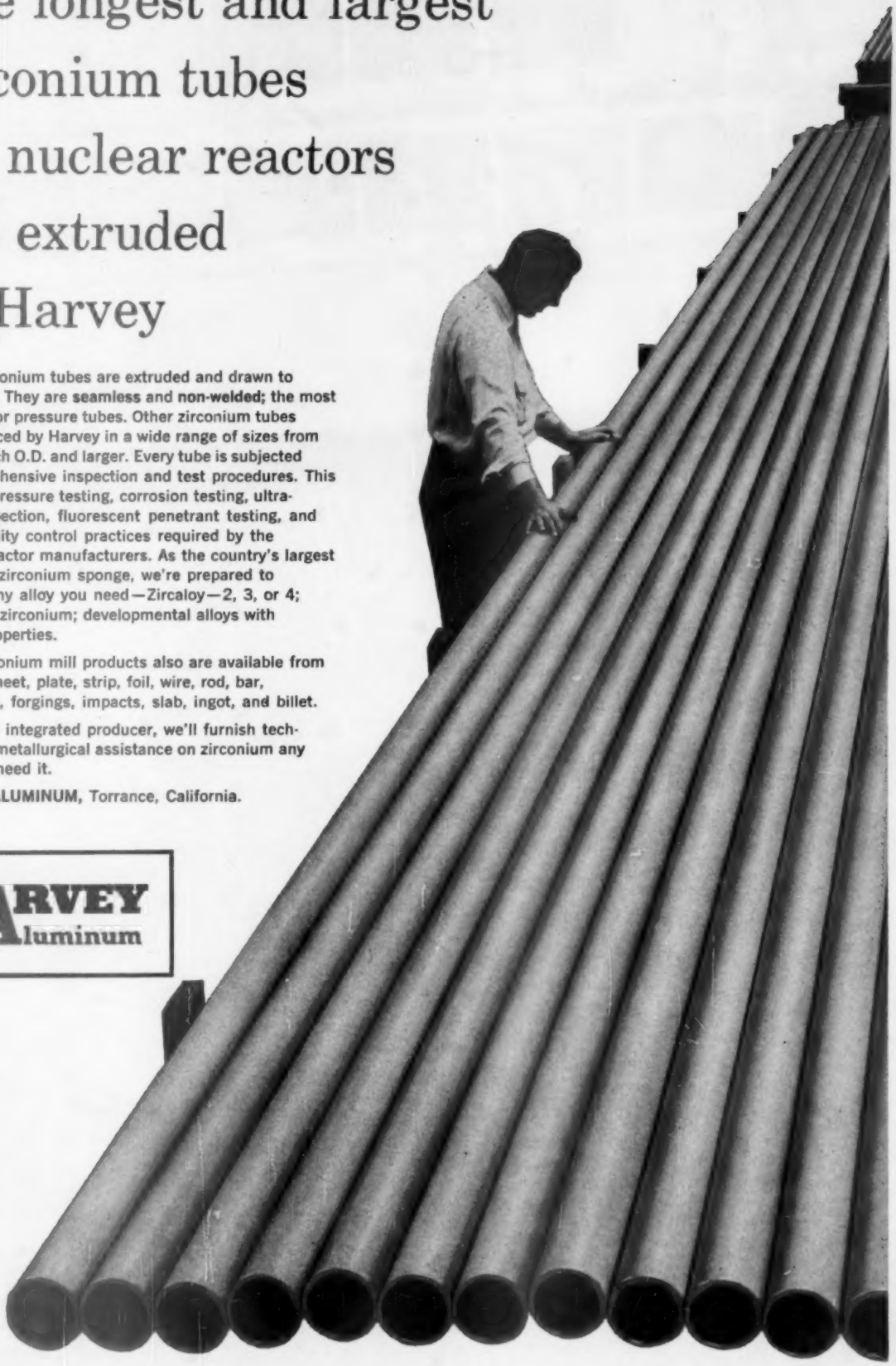

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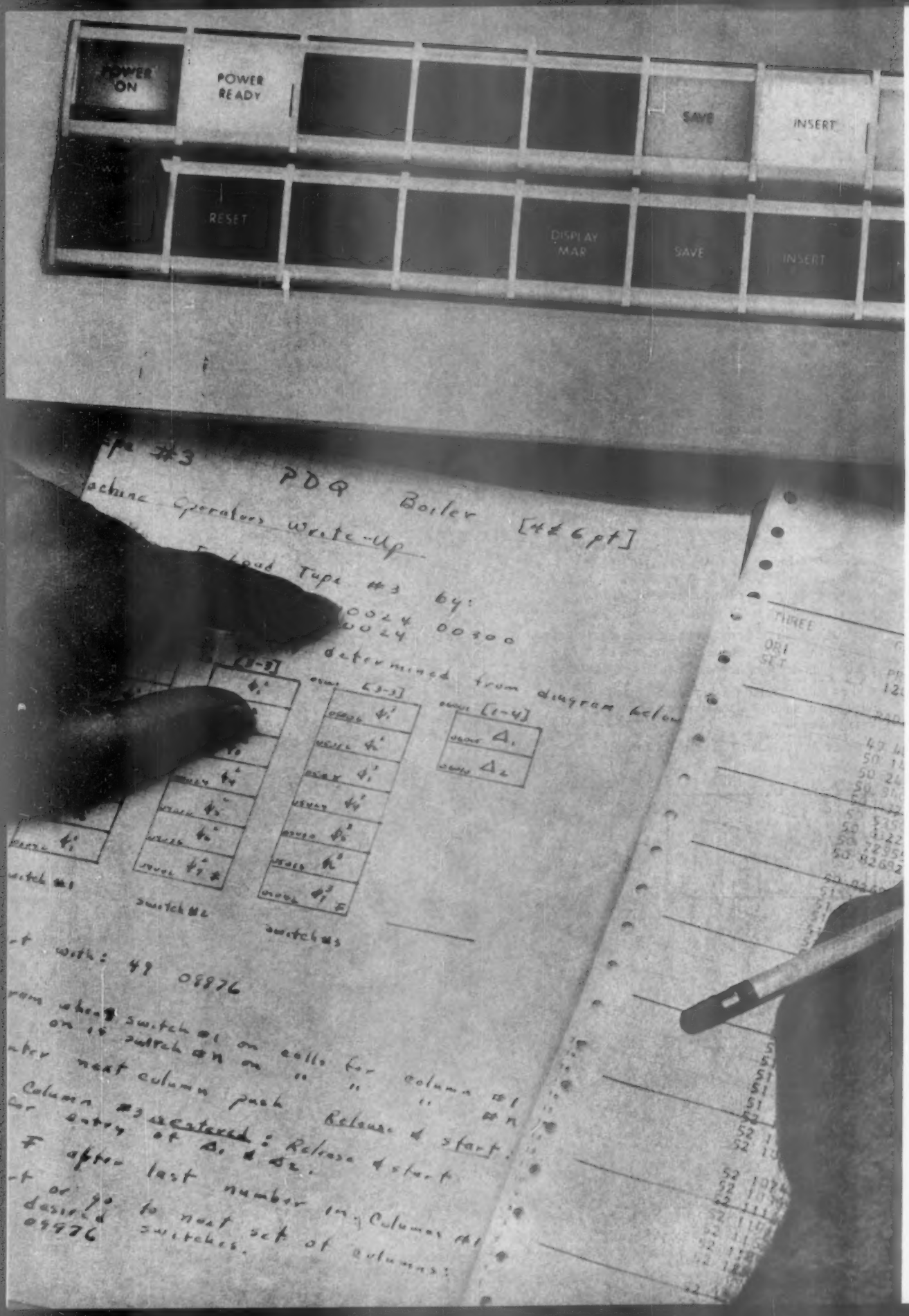
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RESET
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determined from diagram below
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[3-3]
[1-4]
switch #1
switch #2
switch #3
with: 49 08876
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switch #2 on " " " #n
next column push Release & start.
Column #3 is entered: Release & start
entry of Δ1 & Δ2.
after last number in Column #1
or go to next set of columns:
desired
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Cost of one-dimensional criticality computations drops from an average of $75.00 to $7.50 per problem

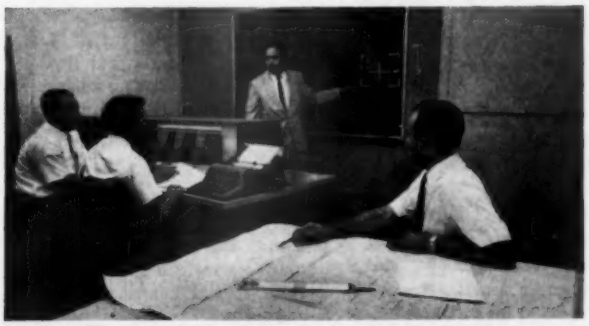
Faster computing, less travel time are the reasons why General Nuclear Engineering Corporation has realized such cost savings since it installed an IBM 1620 Data Processing System at its Dunedin, Florida plant.

Since its main computing facilities are not located at Dunedin, General Nuclear has found that the new 1620 eliminates much of the travel time and expense involved in taking problems to off-site computers. In addition, the 1620 performs the simpler criticality computations 10 times faster than the computer previously used at one of General Nuclear's off-site data processing centers.

General Nuclear uses its new 1620 for other problems, too...heat transfer calculations, various transient codes, mathematical routines for the physics and engineering departments, multi-group calculations, and many other jobs you might expect only a much more expensive computer to be able to handle.

This isn't all. General Nuclear uses the 1620 to do statistical analyses and variance calculations on input data for programs run on off-site large-scale IBM computers.

For information on this highly versatile, low-cost data processing system, which rents for as little as $1600 a month, contact your local IBM Representative.



Easy to program. FORTRAN, IBM's scientific computer language is available for the 1620. General Nuclear scientists use a special scientific interpretive program—FIDO—written by the Manager of their Computing Section.

IBM®
DATA PROCESSING

Meehanite shielding doors made by Lincoln Foundry Corp., Los Angeles, weigh 62,000 lbs. and measure 22" thick by 9' by 8'. Cast in type GM Meehanite metal, they passed complete ultrasonic inspection and density checks requiring 7.22 to 7.34.

PROVIDE POSITIVE PROTECTION

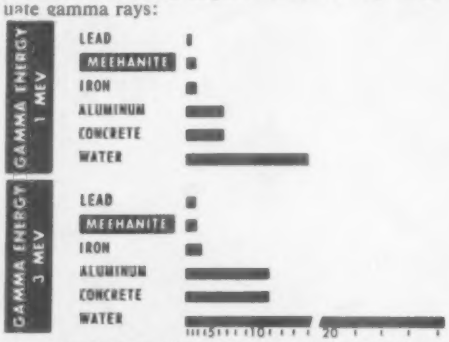
Shielding from dangerous radiation poses a difficult technical and economical problem. In choosing a shielding material, there are many factors to be considered in addition to minimum shielding thickness. Some of these are weight, cost, strength, energy absorption, secondary gamma production, ease and accuracy of manufacture.

Meehanite metal has played an active and important role in the shielding of nuclear reactors and is increasingly being used in place of, or in conjunction with, lead, concrete, steel and other materials for shields, hot cell nodules, storage consoles, transfer casks, etc. Over 500 tons of Meehanite metal were used as electrolytic cell components at Oak Ridge.

Meehanite metal's uniform and controlled density, and its homogenous molecular structure and strength throughout all casting sections remain unchanged under high energy fluxes. Specific gravity can be adjusted between 7.20 and 7.40 as required. In addition to a consistently dense metal structure, Meehanite castings possess high strength properties, good heat transfer properties, a special ability to attenuate gamma rays and a low susceptibility to radio activity. Ease of fabrication and low cost are other important factors which make Meehanite metal of special interest to the nuclear industry.

SHIELDING EFFECTIVENESS OF MEEHANITE®

Relative thicknesses required to effectively attenuate gamma rays:



For more information write to: Meehanite Metal Corporation, 714 North Avenue, New Rochelle, N. Y.

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MEEHANITE CASTINGS ARE MADE ONLY BY MEEHANITE FOUNDRIES.

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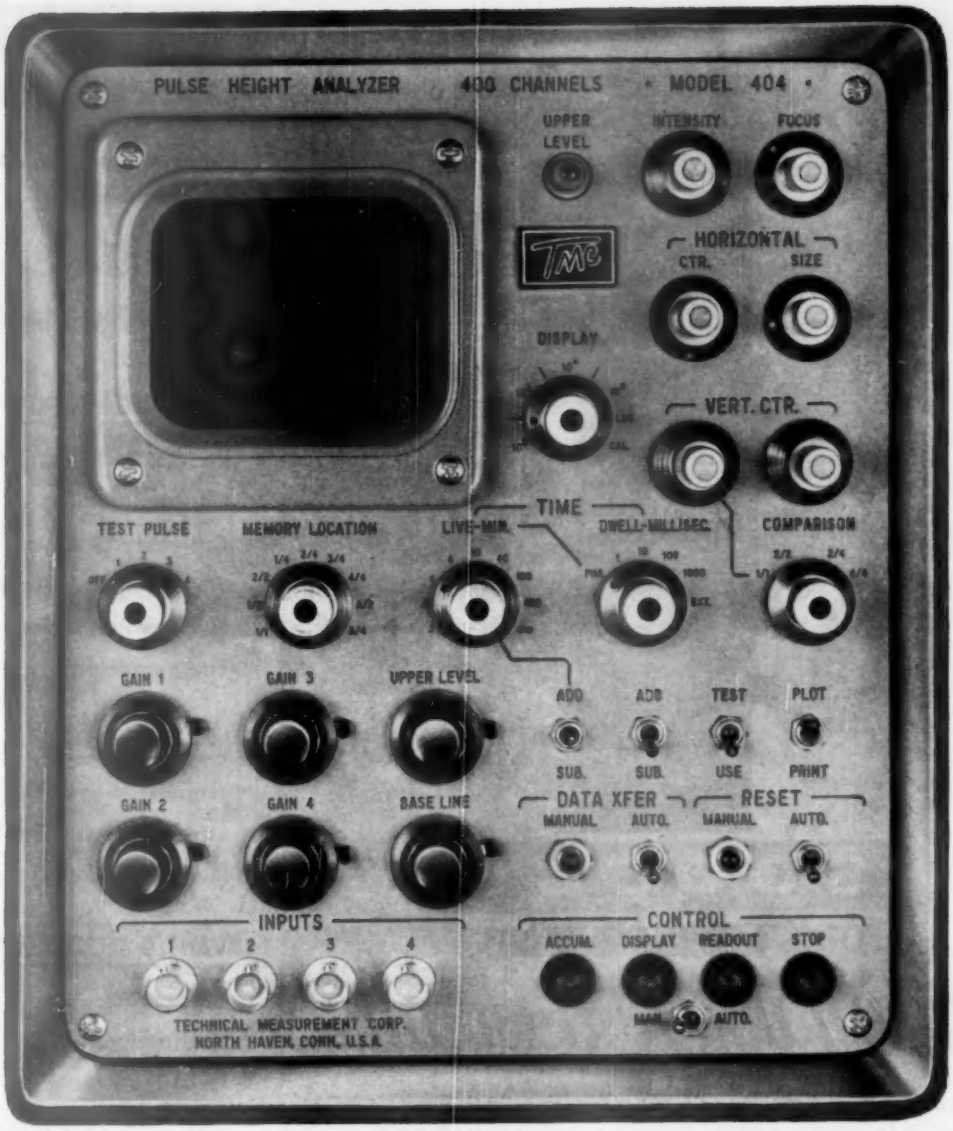

efficient 4-input, 400-channel pulse height analyzer is easy to use, has many "system" features, weighs 37 lbs., occupies one cubic foot, operates on 110 or 220 volts, 50 to 400 cycles AC.

Each input has its own linear amplifier and gain control. Information can be stored in four 100-channel groups, two 200-channel groups or one 400-channel group. Direct readout on TMC Model 500 Decimal Printer, X-Y or strip chart recorder, IBM computer typewriter or paper tape punch. Add these facts (and the moderate price of the instrument) to the versatility suggested by front panel photo — and you have the reason for the TMC 404's popularity. Write for Bulletin 400.

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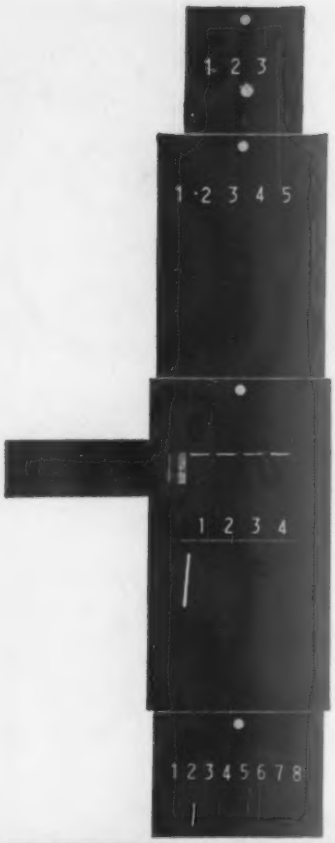

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B. Electric Reset — Type TCeF5E — Available also with 4 or 6 digits—single pulse resets all figures to zero. Speeds up to 50 imp/sec.

C. Predetermining Counter — Type TCeZ4PE — Available with manual or electric reset. Double-throw switch actuated at zero. Electric-reset models available with built-in rectifier for AC operation.

D. Eight Digit Totalizer (No Reset) — Type TCe8E — also available in seven digit model. Low power requirement. Compact. Economical.

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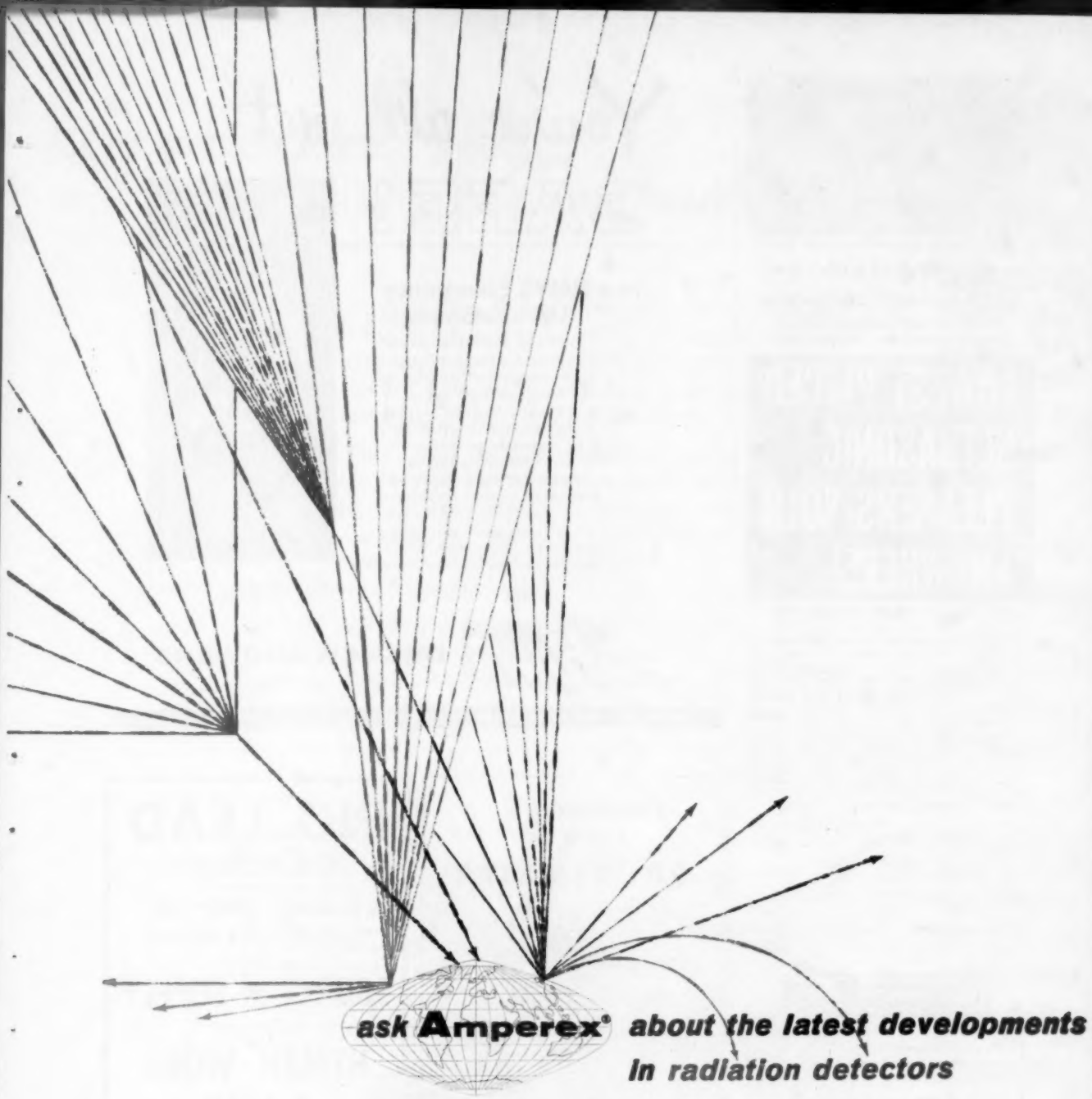

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ASARCO LEAD SHIELDING

Asarco radiation shielding materials are made from metallurgically sound, high density lead to assure maximum protection with minimum weight and volume. The slightest flaw detected by ultrasonics and other quality controls is reason for rejecting, remelting and recasting fabricated lead.

Asarco shielding lead is available in rolled, extruded and cast shapes; laminates; patented interlocking bricks; and rolled strip, sheet and plate in a wide range of weights, widths, lengths and thicknesses. Whatever your shielding problem, Asarco is your reliable source for solutions. Blueprints or sketches are invited.

For your copy of Bulletin 193, "Lead for Radiation Shielding," write on your company letterhead to: Federated Metals Division, American Smelting and Refining Company, 120 Broadway, New York 5, N. Y.

ASARCO LEAD FACILITIES:

Smelters—Selby, Calif.; East Helena, Mont.; El Paso, Texas.
Refineries— Selby; Omaha, Neb.; Perth Amboy, N. J.
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PAT. NO. 2,970,219

ASARCO

146-0033

TRANSISTORIZED DESIGNS

MODEL	DC OUTPUT VOLTS	DC OUTPUT AMPS	REGULATION
SM 14-7M	0-14	0-7	0.1%*
SM 14-15M	0-14	0-15	
SM 14-30M	0-14	0-30	
SM 36-5M	0-36	0-5	
SM 36-10M	0-36	0-10	
SM 36-15M	0-36	0-15	
SM 75-2M	0-75	0-2	
SM 75-5M	0-75	0-5	
SM 75-8M	0-75	0-8	
SM 160-1M	0-160	0-1	
SM 160-2M	0-160	0-2	
SM 160-4M	0-160	0-4	
SM 325-0.5M	0-325	0-0.5	
SM 325-1M	0-325	0-1	
SM 325-2M	0-325	0-2	
SC 18-0.5M	0-18	0-0.5	0.1%
SC 18-1M	0-18	0-1	
SC 18-2M	0-18	0-2	
SC 18-4M	0-18	0-4	
SC 36-0.5M	0-36	0-0.5	
SC 36-1M	0-36	0-1	
SC 36-2M	0-36	0-2	
SC 3672-0.5M	36-72	0-0.5	
SC 3672-1M	36-72	0-1	
SC 32-0.5	0-32	0-0.5	0.01%
SC 32-1	0-32	0-1	
SC 32-1.5	0-32	0-1.5	
2SC 32-1.5	0-32	0-1.5	
Dual output	0-32	0-1.5	
SC 32-2.5	0-32	0-2.5	
SC 32-5	0-32	0-5	
SC 32-10A	0-32	0-10	
SC 32-15A	0-32	0-15	
SC 60-2	0-60	0-2	
SC 60-5	0-60	0-5	
2SC 100-0.2	0-100	0-0.2	
Dual output	0-100	0-0.2	
SC 150-1	0-150	0-1	
SC 300-1	0-300	0-1	
PSC 5-2	0-7.5	0-2	0.02%
PSC 10-2	7.5-12.5	0-2	
PSC 15-2	12.5-17.5	0-2	
PSC 20-2	17.5-22.5	0-2	
PSC 28-1	22.5-32.5	0-1	
PSC 38-1	32.5-42.5	0-1	
SR 12-50	5-13	0-50	0.1%
SR 28-50	24-32	0-50	
SR 48-30	44-52	0-30	
HB 2M	0-325	0-200ma	0.1%*
HB 4M	0-325	0-400ma	
HB 6M	0-325	0-600ma	
HB 8M	0-325	0-800ma	

*0.01% REGULATION AVAILABLE

MAGNETIC DESIGN

MODEL	DC OUTPUT VOLTS	DC OUTPUT AMPS	REGULATION
KM 236-15A	0.1-36	0-15	0.5%
KM 236-30	0.1-36	0-30	
KM 236-50	0.1-36	0-50	

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ABC 30—0.3M*	0—30v dc @ 300ma	$119.00
ABC 40—0.5	0—40v dc @ 500ma	$139.00
ABC 40—0.5M*	0—40v dc @ 500ma	$159.00

*Suffix "M" denotes metered unit.
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KS 36—30M*	0—36v dc @ 30amp
KS 36—30X**	0—36v dc @ 30amp
KS 36—30MX	0—36v dc @ 30amp

*Suffix "M" denotes metered unit.
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SOLID STATE DESIGN

MODEL	DC OUTPUT VOLTS	DC OUTPUT AMPS	REGULATION
PR 15-10M	0-15	0-10	±1%
PR 15-30M	0-15	0-30	
PR 38-5M	0-38	0-5	
PR 38-15M	0-38	0-15	
PR 80-2.5M	0-80	0-2.5	
PR 80-8M	0-80	0-8	
PR 155-1M	0-155	0-1	
PR 155-4M	0-155	0-4	
PR 310-0.6M	0-310	0-0.6	
PR 310-2M	0-310	0-2	

VACUUM TUBE DESIGNS

800B	#1 0-600	0-200ma	<0.1%
	#2 0-600	0-200ma	
	Parallel 1 & 2 0-600	0-400ma	
	Series 1 & 2 0-1200	0-200ma	
430D	#1 0-450	0-300ma	
	#2 0-450	0-300ma	
	Parallel 1 & 2 0-450	0-600ma	
	Series 1 & 2 0-900	0-300ma	
2400B	#1 0-150 Bias	0-5ma	
	#2 0-400	0-150ma	
	#3 0-400	0-150ma	
	Parallel 2 & 3 0-400	0-300ma	
	Series 2 & 3 0-800	0-150ma	
103	#1 0-300	0-75ma	unregulated
	#2 0-300	0-75ma	
	#3 -50 to +50	0-5ma	
	Parallel 1 & 2 0-300	0-150ma	
400B	0-400	0-150ma	<0.1%
	0-150 Bias	0-5ma	
605	0-600	0-500ma	
	0-150 Bias	0-5ma	
615B	0-600	0-300ma	
	0-150 Bias	0-5ma	
1250B	0-1000	0-500ma	
1220C	0-1200	0-50ma	
1520B	0-1500	0-200ma	
2500	0-2500	0-50ma	
KR 11M	0-150	0-125ma	0.1%
KR 1M	100-200	0-125ma	
KR 2M	195-325	0-125ma	
KR 9M	295-450	0-125ma	
KR 8M	0-150	0-300ma	
KR 5M	100-200	0-300ma	
KR 6M	195-325	0-300ma	
KR 7M	295-450	0-300ma	
KR 12M	0-150	0-600ma	
KR 3M	100-200	0-600ma	
KR 4M	195-325	0-600ma	
KR 10M	295-450	0-600ma	
KR 16M	0-150	0-1.5amp	
KR 17M	100-200	0-1.5amp	
KR 18M	195-325	0-1.5amp	
KR 19M	295-450	0-1.5amp	

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COMPONENTS

MEASURING DEVICES

Temperature

An accurate, high-speed, resistance-type temperature detector which transmits temperature measurements to indicating, recording, and/or controlling equipment. For temperature measurement of liquids in the radioactive loops of nuclear reactors or other applications where a fast speed of response is required. Shock-resistant, vibration-resistant, and watertight construction to comply with government specifications.

Request Spec E51-9 for engineering details.

Flow

Designed primarily for the measurement of steam flow, liquid flow, or differential pressure in radioactive loops of nuclear reactor installations at maximum service pressures to 3000 psig. Electrically transmits signals to indicating, recording, and/or controlling equipment. Shock and vibration resistant to comply with government specifications. All welded body prevents leakage of radioactive fluids.

Request Spec E21-5 for engineering details.

Pressure

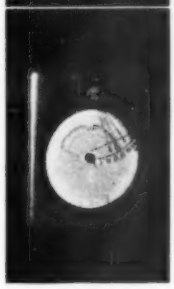
For the pressure measurement of steam, liquids, or gases in radioactive loops of nuclear reactor installations. Electrically transmits signals to indicating, recording, and/or controlling equipment. Shock and vibration resistant to comply with government specifications. For pressures up to 3000 psig.

Request Spec E41-5 for engineering details.

DISPLAY DEVICES

Indicators

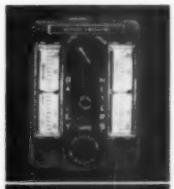
Miniature gage for indication of one or more measured variables. Direct operating and/or electric or pneumatic receiving. Permits grouping as many as twenty variables. Shock and vibration resistant to comply with government specifications. Request Specs P11-1 and E12-1 for details



Recorders

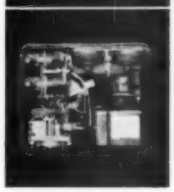
Receiver recorder and controller for electric or pneumatic transmission and/or mechanical measuring systems. Up to four records may be grouped on one circular chart. Sealed capillary-action inking system provides clear, continuous chart records without "poisoning". Interchangeable plug-in units provide application flexibility. Request Spec E12-5 for details on recorder and plug-in units.

CONTROL DEVICES



Selector Station

Provides all indications and controls necessary for hand operation of a pneumatic control system and for transferring from hand to automatic control. Complies with government shock- and vibration-resistant specifications. Request Spec P99-1 for engineering details.



Computing Relay

Versatile analog computer for multiplying, dividing, subtracting, averaging, or totalizing pneumatic signals. As a controller, it provides Proportional, Reset, and/or Rate control actions. Request Spec P99-3 for details.

SYSTEMS

Bailey Meter Company can provide any combination of control, information, or computing systems as required to perform specific functions in individual installations. Listed below are various nuclear installations which include Bailey Instruments and Controls.

1. Enrico Fermi Atomic Plant, Power Reactor Development Co.
2. NS Savannah
3. Shippingport Atomic Station, Duquesne Light Co.
4. Santa Susana Station, Southern California Edison Co.
5. Indian Point Station, Consolidated Edison Co.
6. Dresden Nuclear Power Station, Commonwealth Edison Co.
7. Yankee Atomic Electric Co.
8. Vallecitos Boiling Water Reactor, Pacific Gas & Electric Co.

For details on any of these installations or for additional information on Bailey's capabilities, please contact us.

N169-1

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Westinghouse has all these commercial atomic power facilities

ATOMIC EQUIPMENT DEPARTMENT. Produces canned motor pumps, nuclear reactor valves and control rod mechanisms. Westinghouse pioneered these products.

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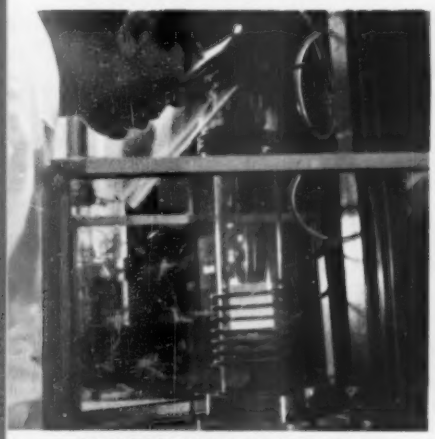
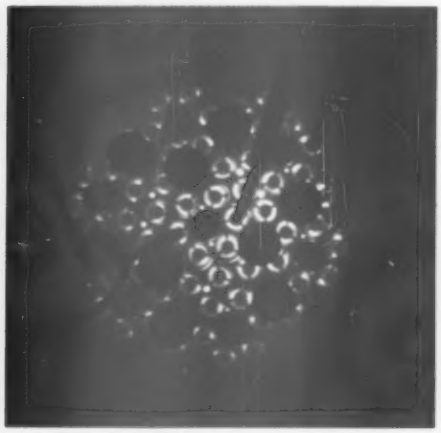


RESEARCH LABORATORIES. Westinghouse research has led to many important developments in nuclear science. Research is conducted by nuclear experts using advanced research facilities.



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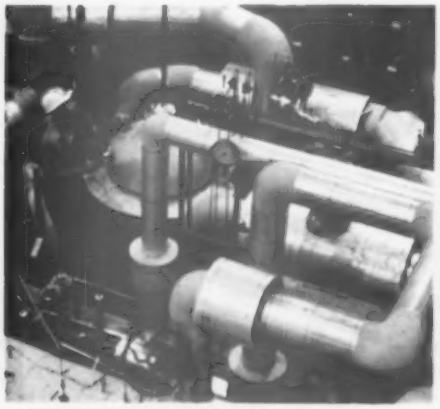
NUCLEAR CONTROL DEPARTMENT. Westinghouse control and instrumentation systems insure complete electrical compatibility in all phases of the nuclear power producing process.



ATOMIC POWER DEPARTMENT. Here the work of thousands of Westinghouse employees is coordinated in the design and development of complete nuclear power plants.

HEAT TRANSFER DEPARTMENT. Advanced designs and fabrication techniques employed in Westinghouse heat transfer equipment are major factor in efficiency and performance of Westinghouse nuclear power units.

and has designed or is developing the reactors for all these atomic power plants

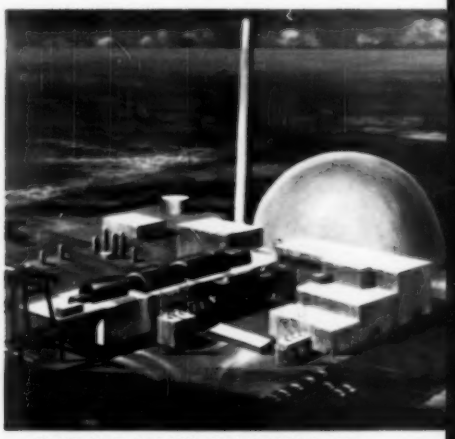
SENA, FRANCE. A 259-megawatt plant in Chooze, France, near the Belgian border (Artist's concept).

SAXTON, PA. An experimental water reactor to be used with an existing turbine-generator of the Pennsylvania Electric Company.

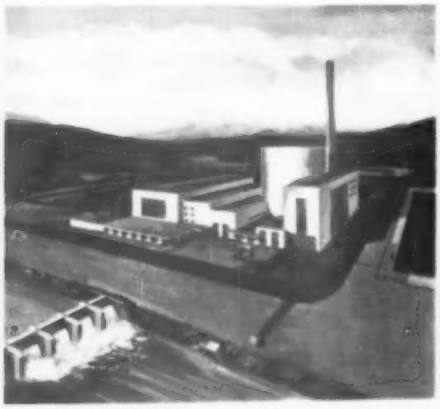
BR-3, MOL, BELGIUM. 11,500-kw plant for Centre d'Etude de L'Energie Nucleaire.

CAROLINAS-VIRGINIA. A 19,000-kw heavy water cooled and moderated pressure-tube prototype plant at Parr, S.C., for Carolinas-Virginia Nuclear Power Associates.

YANKEE. 150-megawatt plant for the Yankee Atomic Electric Co. at Rowe, Mass. New England's first atomic power plant is now producing electricity for the region's integrated power system.



SOUTHERN-CALIFORNIA-EDISON. 375-megawatt nuclear power plant proposed for Southern California (Artist's concept).



SELNI, ITALY. 186-megawatt advanced water reactor power plant for Societa Elettronucleare Italiana (Artist's concept).

SHIPPINGPORT, PA. Plant of Duquesne Light Co., the nation's first nuclear powered central station. Reactor designed by Westinghouse in cooperation with Naval Reactors Branch of the AEC.

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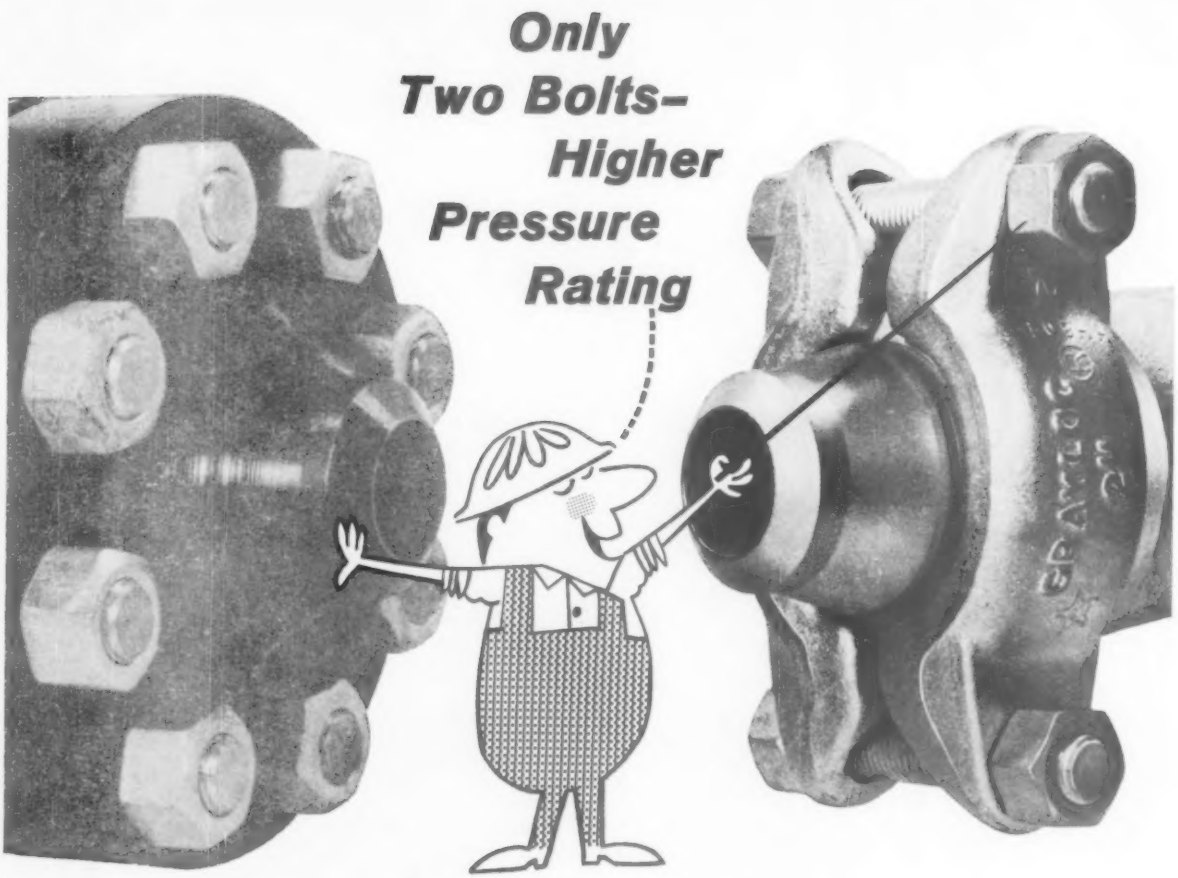

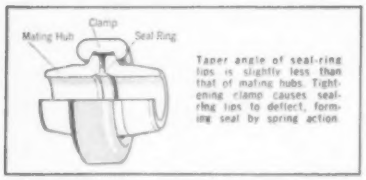

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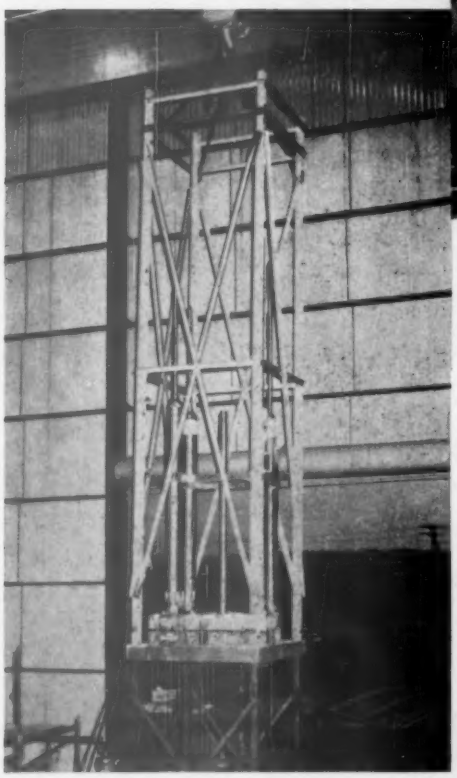
A. & S. fabricated, machined, assembled, and tested the instrumentation support structure under the supervision of Westinghouse and YANKEE ATOMIC ELECTRIC CO.

SKILLED ASSEMBLERS AND WELDERS place shield over one of the four penetrations for in-core instrumentation leads of the Yankee nuclear power reactor



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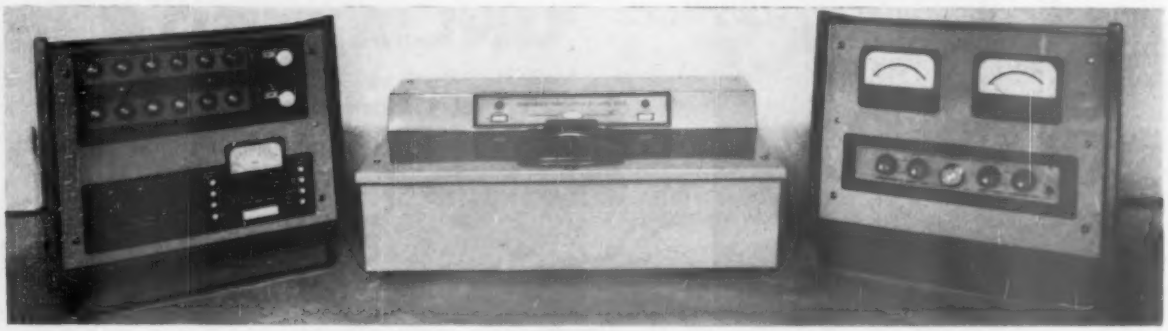
The equipment consists of a Measuring Head and an Electronic Unit; it is shown operating with a Scaler type 1700 but the Counter provides a signal which is acceptable to most commercially available scalers.



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ON JULY 7, 1961, AMF ATOMICS' PRESSURE TUBE REACTOR UNDERWENT SUCCESSFUL CRITICAL TESTING. USING FUEL ELEMENTS SEPARATELY ENCLOSED IN THEIR OWN PRESSURE VESSELS, THIS POOL REACTOR CAN ACHIEVE UP TO 40 MW POWER AT FAR LESS THAN HALF THE COST OF ANY PRESENTLY KNOWN DESIGN.

Since the first pool reactor built at Oak Ridge to operate in the KW range, four major improvements contributing to versatility and power of pool reactors have been made. These culminated in the IRL (Industrial Reactor Laboratories) which attains 5 MW and the 15 MW ASTRA reactor in Austria, both built by AMF Atomics.

- ☐ **experimental facilities were introduced into the core**
- ☐ **forced convection of water permitted MW ratings**
- ☐ **a holdup tank was incorporated in the coolant system (IRL) to reduce water activity**
- ☐ **a layer of demineralized water was introduced to reduce surface activity (ASTRA)**

In an open pool, the coolant cannot be pressurized; nor are coolant flow rates beyond 10,000 gpm practical. Further, coolant activation becomes a problem at the 20 MW level.

Yet, an open pool design has maximum inherent accessibility and versatility.

In PTR, AMF Atomics has **proved** a way of maintaining accessibility and, at the same time, increasing power levels far beyond any presently known design.

PTR: UP TO 40 MW POWER

In the PTR concept, coolant and shielding fluids (water) are in separate systems, the former pressurized and flowing through individually encapsulated elements, the latter in a separate pool water loop that cools control blades and also provides a built-in mechanism to collect leakage from the pressurized coolant system should it occur.

In addition to a unique arrangement in the core, PTR fuel elements differ markedly from standard. Tops of elements are sealed. Two-pass coolant flow is utilized in each element: coolant goes up through outside pass of each element, reverses and descends through the inner pass, all, of course, inside the element's pressure vessel. Thus, coolant flow rate is reduced.

OTHER ADVANTAGES OF PTR

PTR's prime advantage is power plus core accessibility at low cost. Here are others:

1. **Existing pool reactors can be converted with minimum coolant system modifications. Two-pass flow reduces capital cost of new coolant system.**
2. **Fast flux irradiation space is provided in center of each element. Coolant temperature can be monitored element by element.**
3. **Geometry of PTR fuel makes core adaptable for in-pile loops.**
4. **Existing fuel element design is used.**
5. **Design avoids expensive reactor pressure vessels.**

There are many other advantages, all equally significant.

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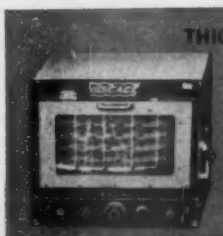

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Methods of Experimental Physics
Edited by L. Marton

Volumes 5A and 5B, NUCLEAR PHYSICS
Edited by Luke C. L. Yuan *and* Chien-Shiung Wu
VOLUME 5A, *October 1961, 733 pp., $18.00*
VOLUME 5B, *in preparation*

This authoritative work has been written by an international group of authors, each of whom has broad knowledge and experience related to the method of which he writes.

Advances in Nuclear Science and Engineering
Edited by Ernest J. Henley *and* Herbert Kouts
VOLUME 1, *1962, in preparation*

This new serial publication will publish definitive summaries of work in the fields of nuclear science and engineering—some will be reviews of new developments in established fields, others will analyze new technology and methods, all will be authoritative and critical.

Chemical Processing of Reactor Fuels
Edited by John F. Flagg
September 1961, 530 pp., $17.50

This book discusses the various wet chemical methods for processing nuclear fuels from a variety of nuclear reactors—power, research, or production.

Fuel Element Fabrication
With Special Emphasis on Cladding Materials
Proceedings of a Symposium held in Vienna, May 1960
PUBLISHED FOR THE INTERNATIONAL ATOMIC ENERGY AGENCY
VOLUME 1 *June 1961, 538 pp., $14.00*
VOLUME 2 *August 1961, 384 pp., $10.00*

These proceedings are being published with the expectation that they will be an important source of information to scientists and industrial groups in this field.

Instruments and Measurements
Chemical Analysis, Electric Quantities, Nucleonics and Process Control
Edited by Helge von Koch *and* Gregory Ljungberg
VOLUME 1, *July 1961, 506 pp., $16.00*
VOLUME 2, *July 1961, 721 pp., $22.00*

The proceedings of the Fifth International Instruments and Measurements Conference, sponsored by the Royal Swedish Academy of Engineering Sciences and the Swedish Association of Technical Physicists.

Nuclear Science and Engineering
The Journal of the American Nuclear Society
Editor: Everitt P. Blizard
VOLUMES 9-11, *1961 (4 issues per volume, 7¾" x 10½"), each $19.50*

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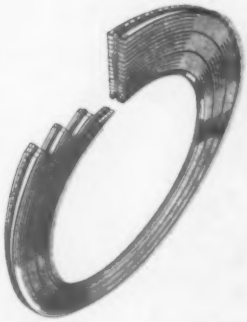

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LOOK FIRST TO

...FOR COMPLETE GAMMA SHIELDMENTS

100-ton Door Hung at Indian Point

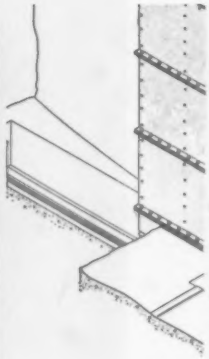
In this space a year ago appeared an isometric drawing of an access door to be built by National Lead for Consolidated Edison's Indian Point atomic power plant, at Buchanan, N. Y. This door has now been installed.

Working from Con Edison prints and specifications, National Lead handled the entire job—door, framing and operating mechanism—as a one-responsibility project. The door consists of a sheet steel "shell" filled with specially shaped lead brick and with lead shot run in to fill any voids. The frame around the opening is also packed with lead brick and shot. In all, the 16′ by 13′ by 13″ door and its framing required some 160 tons of lead. A number of lead-shielded casks and shrouds were also supplied by National Lead for the handling and storage of hot materials at the plant.

This Indian Point job is a good example of National Lead's capability in gamma shielding. Expanded facilities, highly experienced staff and nuclear know-how enable National Lead to undertake virtually any gamma shielding assignment from design to installation . . . undertake it on a one-responsibility basis that *gets the job done.* Moreover, if the shield is to be tested, National Lead has complete radiographic and ultrasonic equipment, operated by licensed personnel, to do the testing.

National Lead also offers a spent fuel element handling service which encompasses:

Container design — fabrication — operation and maintenance—obtaining approval from AEC, ICC, Bureau of Explosives and U. S. Coast Guard—and transportation to reprocessing sites. If you have any problems involving shielding or the handling of hot materials, we will welcome an opportunity for a discussion.



Lead shielded access door installed in the Indian Point plant of Con Edison.

Setting lead brick in door.

Access door as it appears from inside biological sphere.

Lead brick being placed at base of doorway.

NATIONAL LEAD COMPANY

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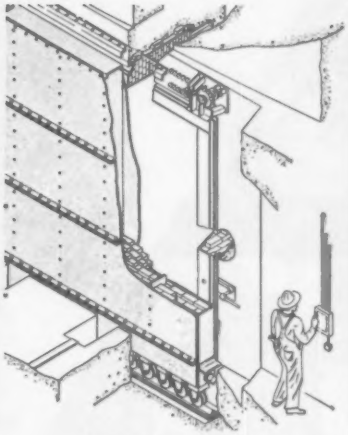
NATIONAL LEAD



One year ago the door was only a drawing.

Lead brick being set in door frame

Pouring lead shot to fill joints between bricks in door frame.

...FOR NUCLEAR METALS SERVICES

Men, Machines and Methods for Working Nuclear Metals

The Nuclear Metals Division of National Lead operates fully integrated metal fabricating facilities, set up to serve the nuclear industry.

Plant layout includes a special alloy foundry equipped with vacuum arc consumable electrode furnace, vacuum arc skull melting and casting furnace, and vacuum induction melting furnaces with 30-200 kw capacity.

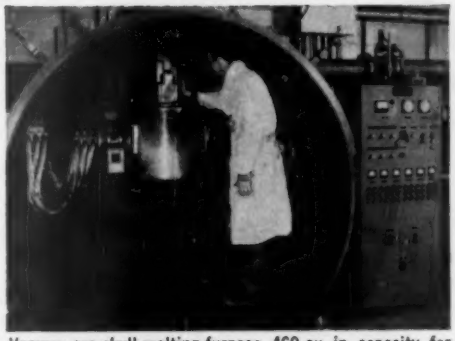
This foundry is backed up by fabricating equipment for extrusion, pressing, forging, rolling, swaging, heat treating, machining, electroplating, inspection and quality control. All operations are carried out by experienced personnel, backed by a mature scientific and engineering staff.

This Nuclear Metals facility processes and fabricates enriched, depleted and normal uranium fuel elements and core assemblies, both oxide and metal. It also is concerned with:

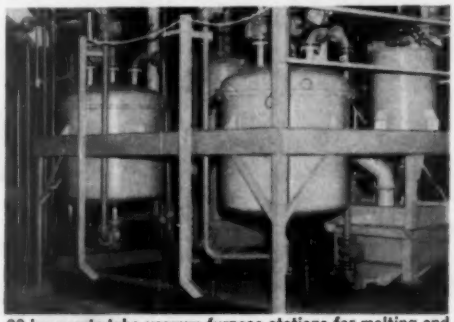
- **Thorium metal casting, fabrication**
- **Depleted uranium shielding**
- **Refractory metal casting and fabrication**
- **Zirconium, titanium alloy casting**
- **Heat and corrosion resistant alloy fabrication**
- **Mold and crucible development**
- **Melting, casting and fabrication technology development for special metals and alloys**
- **Cold uranium scrap reprocessing**

The plant has produced enriched, depleted and normal uranium and thorium fuel elements. It has fabricated depleted uranium shielding in single castings up to 4,000 pounds. It has carried on special thorium casting development work and produced alloyed uranium shapes for ordnance and the aircraft industry.

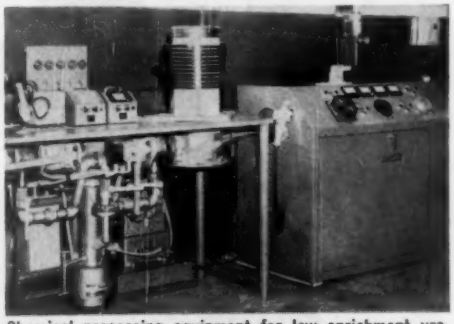
Inquiries on any phase of this Nuclear Metals facility are invited.



Vacuum arc skull melting furnace, 460 cu. in. capacity, for zirconium, titanium and other refractory metal casting.



30 kw quartz tube vacuum furnace stations for melting and casting enriched uranium fuel elements—rods, plates, etc.



Chemical processing equipment for low enrichment uranium cold scrap recovery.

Hot rolling stainless steel—UO_2—SS cermet type fuel plate.

The 75 listings of National Lead products and services in the Buyers' Guide of this magazine indicate National Lead Company's capacity for meeting the numerous needs of the nuclear industry.

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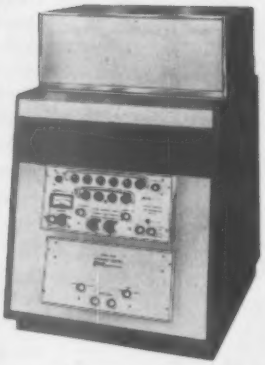
TRI-CARB® liquid scintillation spectrometer

Used for counting alpha and beta emitting isotopes such as C^{14} and Tritium. Manual, semi-automatic or automatic operation for counting up to 100 samples. Non-refrigerated or refrigerated sample handling for higher sample-count to background-count ratios. Fully transistorized for maximum reliability and reproducibility. Available in single or dual channel.



AUTO-GAMMA® spectrometer

Used for counting isotopes that emit gamma rays. Features spectrum "window" that permits counting under true balance point conditions. Maximizes $(\text{efficiency})^2$ to background ratio. Manual or fully automatic for counting up to 100 samples 24 hours per day. Available with scintillation probes or well-type detectors. Digital printer readout for permanent records. Fully transistorized for optimum performance.

ARMAC® scintillation detector

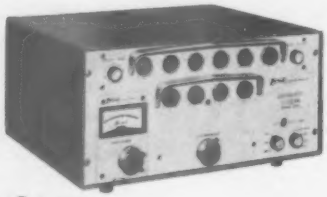
Used for counting radioactivity in small animals, bulk samples of foods, pharmaceuticals and wastes, and as an arm-only counter with humans. Enables the research worker to count even natural levels of radioactivity conveniently. Great sensitivity and excellent counting geometry yield high counting rates with small quantities of radio-isotopes. Detector has 2 inch lead shielding to prevent stray radiation from affecting reading. Provision is made for automatic data read-out or ratemeter presentation. Fully transistorized for optimum performance.

PACKARD radioactivity detection systems...

Acclaimed acceptance by laboratories

continuous gas flow counters

For Geiger and proportional counting. Two types of counter available—window or windowless. Eliminates aging effects that are encountered in sealed counting tubes. Gives essentially unlimited counter life. Provides maximum sensitivity for counting solid samples that emit soft radiations. Lead shielded for greater accuracy and low background count. Designed to achieve full 2 pi geometry for maximum counting efficiency.



scalers

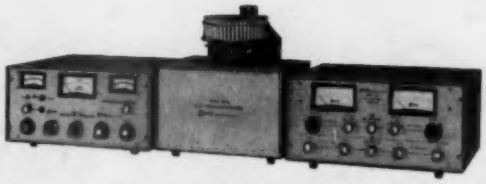
For integral counting of radioactive samples when used with appropriate detector. Decade timer reads in hundredths of minutes up to 100 minutes. Decade scaler has a 1 million count capacity with resolving time of 1 microsecond. A precision discriminator with a front panel helical potentiometer is provided for integral type pulse height analysis. Completely transistorized for maximum reliability and reproducibility.

ratemeters

For differential counting of radioactive samples. Single or dual channel. Five decade log ranges and nine linear ranges. Ratemeter is used to drive a separate strip chart recorder used in conjunction with Packard Spectrometers or Scalers. Transistorized for optimum performance.

TRI-CARB® flow monitor / flow detector

Used with gas and column chromatographs. Excellent resolution with an amino acid analyzer. Easily counts 200 CPM with commercial type. Log and linear scales for simultaneous analysis of one or both channels. Three types of detector available. Dual photomultipliers and coincident pulse circuitry for true sample count. Transistorized for optimum performance.



gas chromatography system

A new gas chromatography system that makes it convenient for the researcher to collect and count radioactivity in the effluent gas. Consists of an oven, temperature controller, regulated DC power supply and an ionization detector. Several types of radioactivity detector may be used with this unit for continuous monitoring of radioactivity in the effluent. For a quantitative analysis of the effluent, it may be trapped in a Tri-Carb Gas Fraction Collector, and counted in the Tri-Carb Spectrometer.

column fraction collectors

For collecting the effluent from a column chromatograph. Automatic Fraction Collector for time and drop counting operation. Consists of turntable, phototube unit and control cabinet. Holds either 75 standard large test tubes or 100 standard small test tubes in two different rows, respectively. Adjustable from 15 seconds to 100 minutes in 15 second steps for time and 1 to 400 drops for drop-counting. Another new design utilizes stationary test tube racks and two dimensional indexing crosshead for filling. Accommodates 400 test tubes. Both time and drop-counting operation are standard—volumetric operation is optional.

radiochromatogram scanner

For rapid location and measuring radioactivity on paper chromatograms. Examines a complete bi-dimensional chromatogram and presents digital information of the location, zone shape and amount of radioactivity present. Active zones are shown in red digits—intermediate activity in black. Maximum individual area resolution is less than 0.05 in.^{2} for sheets. For strips, the maximum resolution is achieved with steps 0.167 inch long.

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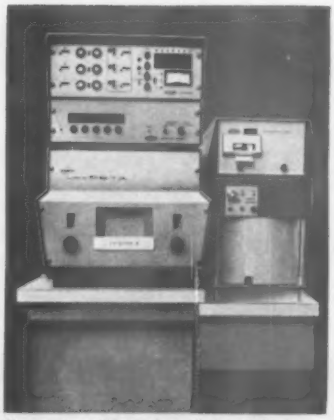
Counts and records data for beta assay, alpha assay — or both simultaneously!

Sharp LowBETAMATIC features all solid state circuitry with compact three-dimensional sample storage.



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New B/A Gamma Spectrometer —

luxury features in a compact, economy package

Model 8250 Spectrometer incorporating the All-Electronic Scaler Model 135, the Model 250 Amplifier-Analyzer and Model F-8 Fan Filter Assembly.

Baird-Atomic announces the new Model 8250 single channel Spectrometer which can be quickly and easily calibrated in energy units (Mev) for any energy range from X-rays to cosmic rays. Spectra can be positioned as desired by the high voltage and the gain controls. Any degree of differential operation (relative window width) or integral operation may be obtained.

The Model 8250 is a combination of two instruments just added to the Baird-Atomic line. They are the Model 250 Amplifier-Analyzer and a new all-electronic Model 135 Scaler. The Scaler, which combines a 5 decade, 5 micro-second scaler and an electronic timer on one chassis, is excellent for both general lab counting work and for use with the most sophisticated automatic sample changing systems.

Write today for details on these instruments and their system combinations.

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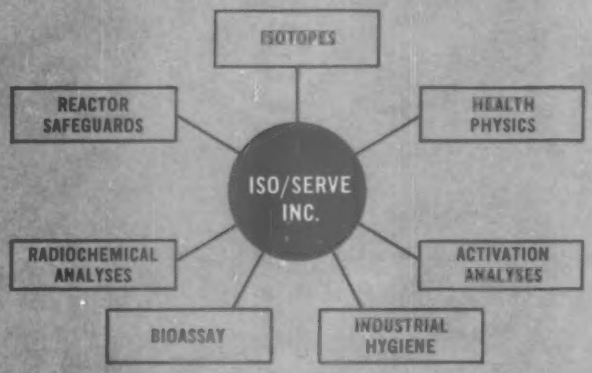

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PROGRESS REPORT

from Nuclear Data

Nuclear Data Inc. offices and plant at Madison, Wisconsin.

Two years ago, Nuclear Data announced its first products. Since then, we have built an efficient organization dedicated to designing and delivering the finest instruments available at the lowest cost. We have now delivered over 200 transistorized multi-channel analyzers, including 80 model ND-120 and ND-130 series analyzers in the past six months.

A few of the design 'firsts' that make these analyzers the most advanced of their kind are described on the opposite page.

PROGRESS AT NUCLEAR DATA HAS SEEN THESE 'FIRSTS' IN ANALYZER DESIGN

1 STABILITY. First to provide 0.2%, 24-hour gain stability, at constant temperature. This is the highest guaranteed stability ever offered in a standard production analyzer. Though not essential for applications involving low-resolution scintillation detectors, this specification is necessary when using high-resolution solid state detectors, with which it is possible to obtain energy resolutions down to 0.2%.

2 DEPENDABILITY. First to provide multichannel analyzers with month-after-month reliability. In recent months, experience with the ND-120 and ND-130 series analyzers indicates an average of more than two analyzer-years' trouble-free operation between failures. This is by far the best dependability record ever achieved by ANY analyzer model.

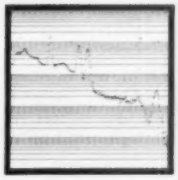
3 LIVE TIMER ACCURACY. First to provide timing accuracy of better than 0.2% at pulse rates of up to 10,000 per second. Precise experiment timing, dead time corrected, requires far more than just a stable 'clock' oscillator, for second-order errors in determining exactly when an analyzer is 'dead' or 'alive' can easily introduce errors of more than a percent. The extremely accurate specification for Nuclear Data analyzers is in contrast to the absence of a specified overall accuracy in other systems.

4 LINEARITY. First to provide a guaranteed integral linearity of better than 0.25% over the top 98% of the range. Linearity over the entire range is sufficiently good that spectral lines differing in energy by a ratio of 100 to 1 can be fully resolved in a single measurement.

5 LOG DISPLAY AND DECADE LINES. First to provide an accurate logarithmic analog readout with internally generated decade calibration lines. These lines can be set at any of nine levels within each decade, and are essential for accurate data interpretation of logarithmic point plots.

MODEL ND-130A
512 Channel Analyzer-Computer

NUCLEAR DATA INC.



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6 PUNCHED TAPE. First to provide readout and read-in. The Nuclear Data model ND-120T and ND-130AT analyzers have internal punch and reader control and drive circuits. Serial decimal logic permits readout without cumbersome data conversion equipment.

7 ACCESSIBILITY. First to provide true in-place circuit accessibility. With the exception of simple memory current switch transistors, all analyzer circuits are easily accessible for inspection during operation, without use of extenders or special cables.

8 DATA REDUCTION. First to provide analyzers with built-in data reduction circuitry for 'spectrum stripping' and fractional background subtraction. This built-in system is not only faster, more dependable, and easier to operate than external magnetic tape systems, but its use avoids the handling and storage problems associated with magnetic tape.

9 FAST SUB-TOTALLING. First to provide analyzers with built-in summation circuitry for integrating areas of selected spectral regions. With this system, the sum of all data points in a selected region is computed in a second or two, and quickly read out by IBM computer readout typewriter.

In addition to these 'firsts', the Nuclear Data analyzers include many advanced circuit design concepts which, though not apparent to the user, have resulted in the finest precision and dependability available today.

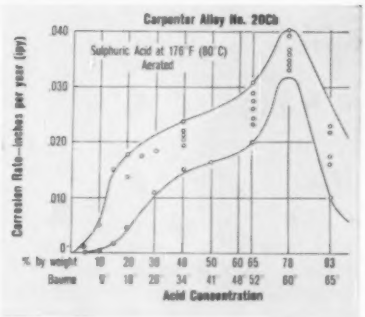
5 extra reasons to consider Carpenter Stainless Steels for your nuclear applications

Quality, uniformity and super-cleanness are obvious requirements for the stainless steels you use. And Carpenter's dedication to exacting standards will more than repay your confidence. But Carpenter goes a step beyond the obvious. Here are a few extra benefits you'll find worth considering.

❶ New developments

One example of Carpenter's nuclear-geared product development program, is stainless type 304 which contains up to 2% of boron 10, an isotope of boron. This alloy was developed especially to provide an effective combination of high neutron absorption and high ductility with good corrosion resistance. This special boron bearing grade of stainless type 304 is being used currently as control rods, "burnable poison" and shielding for nuclear reactors. A technical data sheet on this grade is yours for the asking.

❷ Better corrosion resistance



The wide range of stainless steels available offers you the exact degree of corrosion resistance necessary for almost any corrosive environment. For mild corrodents, Carpenter No. 1 (Type 410) can be used; for extremely severe corrodents such as hot sulphuric acid solutions, Carpenter No. 20Cb should be specified. For other corrodents, one of the many other stainless steels will be the most economical material for you to use.

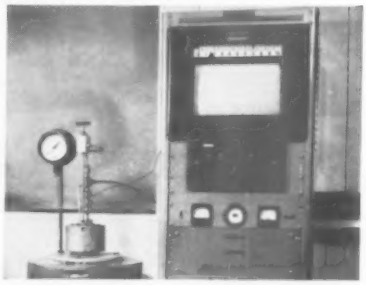
Carpenter No. 20Cb is a special alloy first produced by Carpenter in wrought form. Its excellent resistance to hot sulphuric acid is shown in the chart below, left. For information on its resistance to other corrodents, send for booklet, "Super Corrosion Control".

❸ Improved forgeability

Tough, hard-to-work stainless and heat resisting steels now can be forged to closer tolerances than ever before. Steel waste and rejects can be reduced. This photograph offers proof.

These two forgings were made from the same type stainless steel . . . and forged under identical conditions. The chemical composition of the left-hand disc is within conventional limits. The one on the right shows the result of Carpenter's exclusive balanced analysis. Its chemical composition was precisely adjusted within the specification limits to the balanced analysis which provides optimum hot working properties. For your protection, Carpenter forging grades carry a special label identifying forging quality stainless steel for quality stainless forgings.

❹ Dependable performance



Carpenter Stainless Steels are continually tested and evaluated in the Corrosion Research Center, considered the largest and best equipped of its kind among specialty steel producers. The autoclave pictured here is typical of the equipment used to evaluate materials at high pressures (up to 3000 psi.) and elevated temperatures (up to 750°F). It is used regularly to measure the suitability of stainless and other alloys for nuclear applications.

❺ Technical assistance

This 180-page working data book on stainless and heat resisting steels is typical of the technical help available from Carpenter. It includes descriptions of all grades, properties and characteristics. Also selection help, fabrication tips and useful corrosion tables. Call your Carpenter Representative, or write for a copy. For additional help on specific design or application problems, your Carpenter Representative will be glad to work with you.

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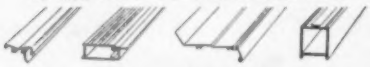

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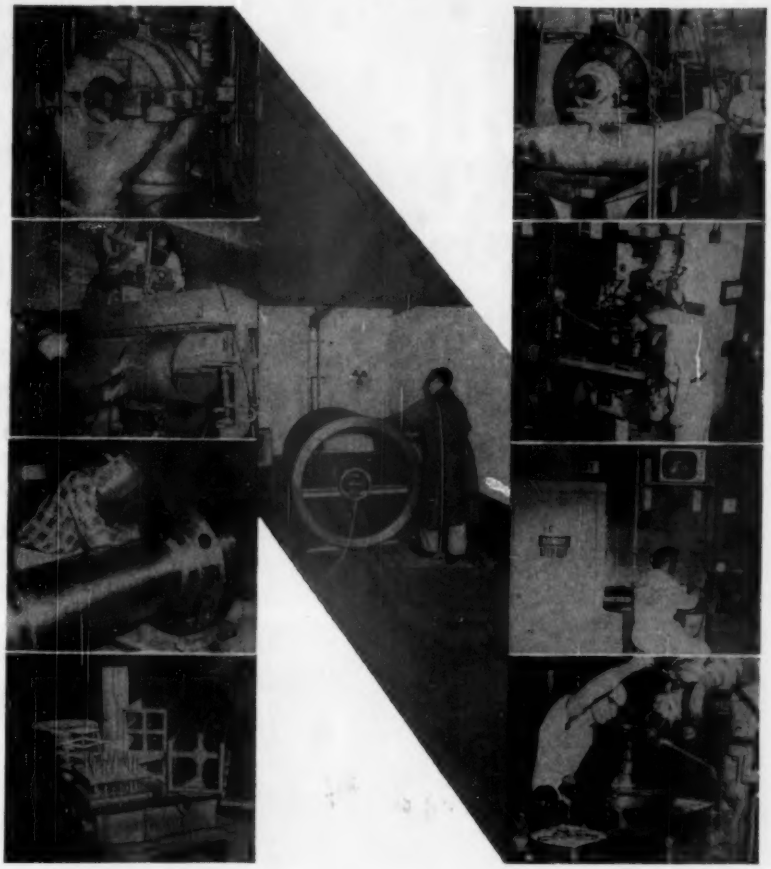

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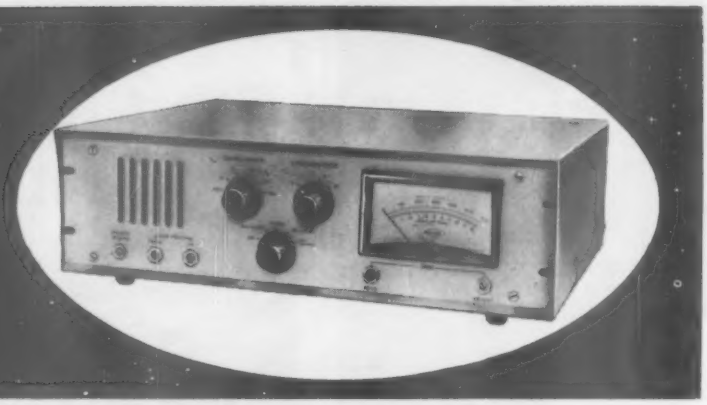

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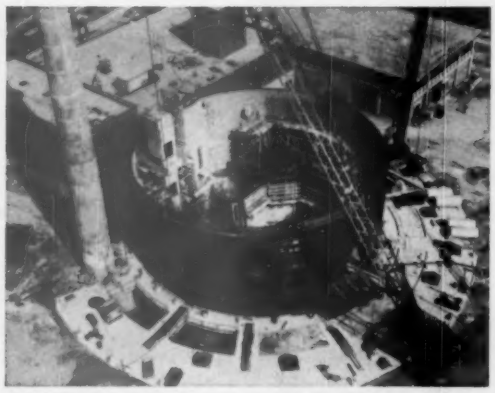

The Experimental Gas Cooled Reactor under construction for AEC at Oak Ridge. Primarily a development tool, the EGCR will generate 25,000 KW from steam at 1250 psig., 900°F. Design by KE.

A 512,000 KW hydro-electric project in Ghana. The 25,000 KW Experimental Gas Cooled Reactor at Oak Ridge. A 106,000 KW industrial steam power plant in Pennsylvania. The New Production Reactor at Hanford. These are just a few of Kaiser Engineers' recent design and/or construction projects. If you need assistance in deciding what kind of plant to build, KE can perform studies for you as it has for others: *for the AEC*—comparing nuclear power concepts with each other and with conventional plants; *for industrial concerns*—comparing nuclear and conventional process steam plants; *for utilities*—comparing alternative new power sources.

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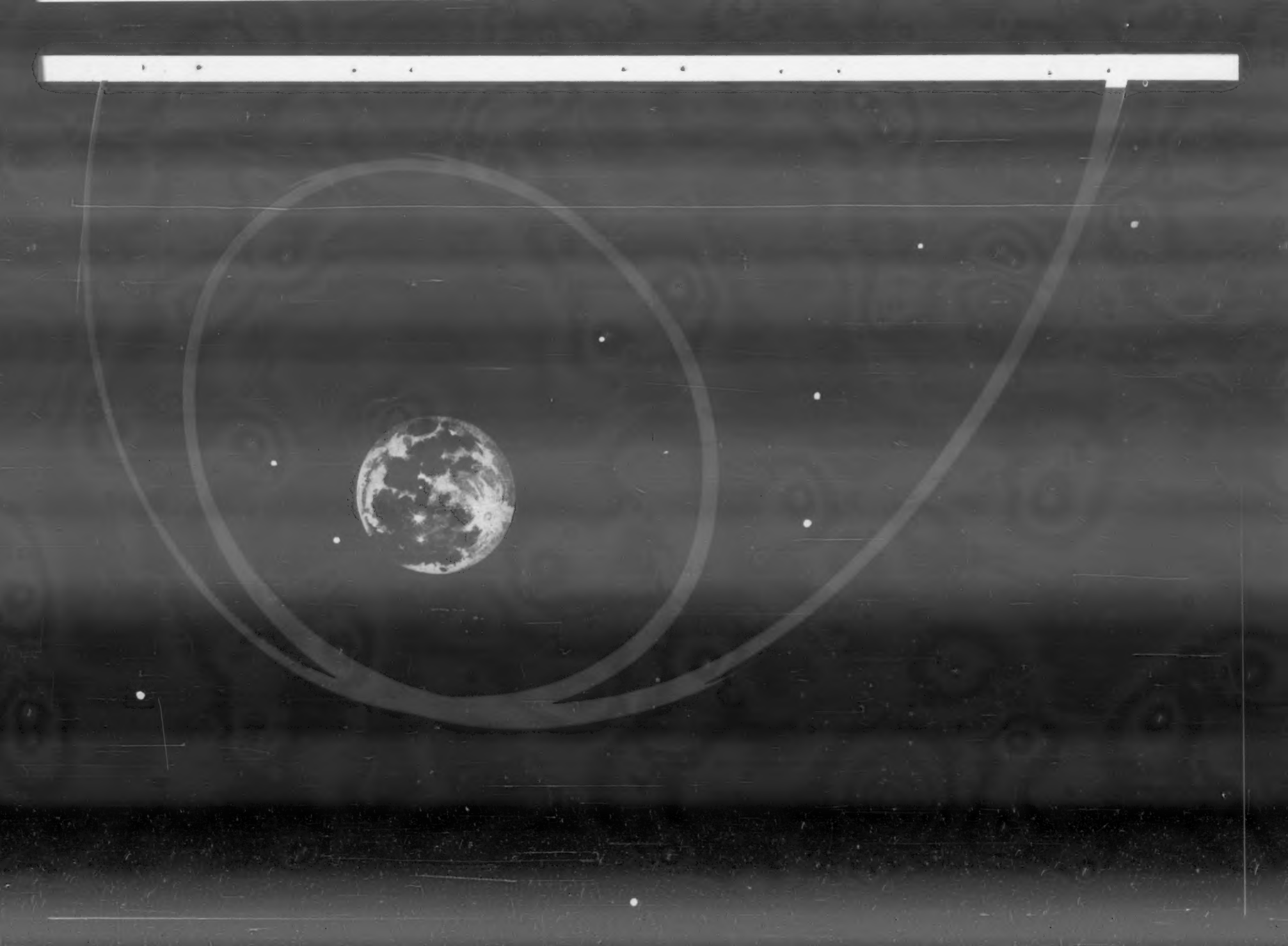

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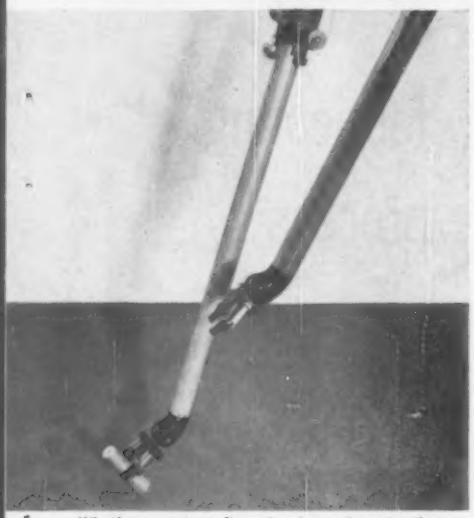
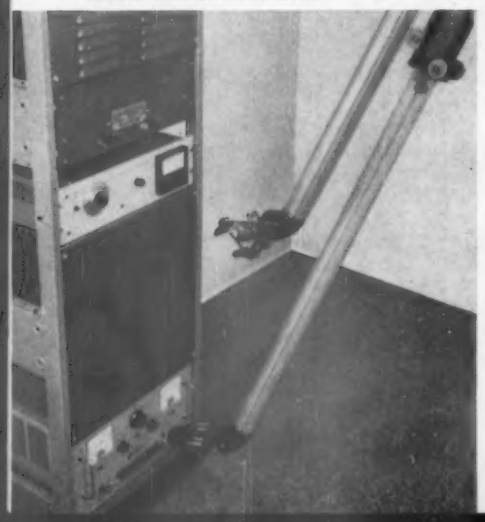
AMF EXTENDED REACH MANIPULATOR



Whether used at floor level or close to the window, AMF Model E.R. permits operator to maintain most comfortable working position as shown at right.

With AMF Model E.R., experiments can be placed or stored in previously inaccessible hot cell areas and standard in-cell equipment can be used without modifications.



A new relationship between master and slave

It triples master-slave manipulator volume coverage in hot cells. It lets operator maintain his most comfortable working position and optimum viewing position while making floor pick-ups and doing below-window operations. It eliminates fatigue in close-to-window handling. It multiplies in-cell storage capabilities. It eliminates need for elevator floors and special equipment to overcome limitations of existing master-slave manipulators.

In fact, it provides for a new, more economical concept of hot cell design and construction!

The basis of the capabilities of the new AMF Extended Reach Manipulator (Model E.R.) is a double telescopic action of the slave end. Over 40 inches of extra stroke (twice the stroke of present designs) are available to the operator with fingertip operating ease... over 40 extra inches of Z motion, controlled by a switch at the master end, that extends the slave end wholly independently of the master end. Thus, floor pick-ups, corner operations, in-cell storage, close-to-window work, and other extended operations are not only possible; but, what's more, they proceed while operator maintains comfortable viewing position. Complete wrist, tong and azimuth operations are available at any extension and there is no increase in tape lengths.

As for hot cell design: At present, mounting heights and cell depths are functions of manipulator minimum retracted lengths. Likewise, the depth of area on the cold side of cell is governed by retracted length for removal purposes. Suppose, instead of doubling the stroke, we maintain normal 40-inch stroke, but cut retracted length by 40% with AMF Model E.R. The same stroke as standard manipulators is achieved, but mounting height, back wall dimensions and depth in front of cell are all reduced by as much as 20 inches. Thus, hot cell sizes and related construction costs now can be significantly reduced. And hot cells can be designed to meet operating standards rather than manipulator mounting requirements. All this with greater usable in-cell coverage.

Write to Dept. E.R. for full information on AMF's new Extended Reach Manipulator... Model E.R.

AMF ATOMICS

A Division of
American Machine and Foundry Company
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With the AMF Model E.R., the operator maintains most comfortable working position during all operations shown at left.

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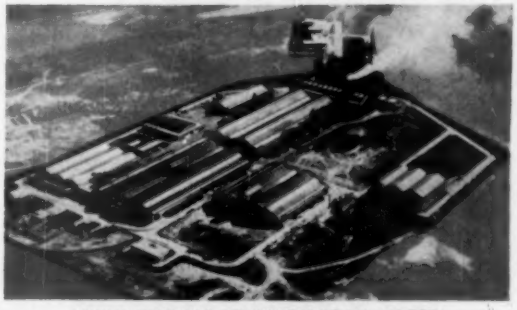

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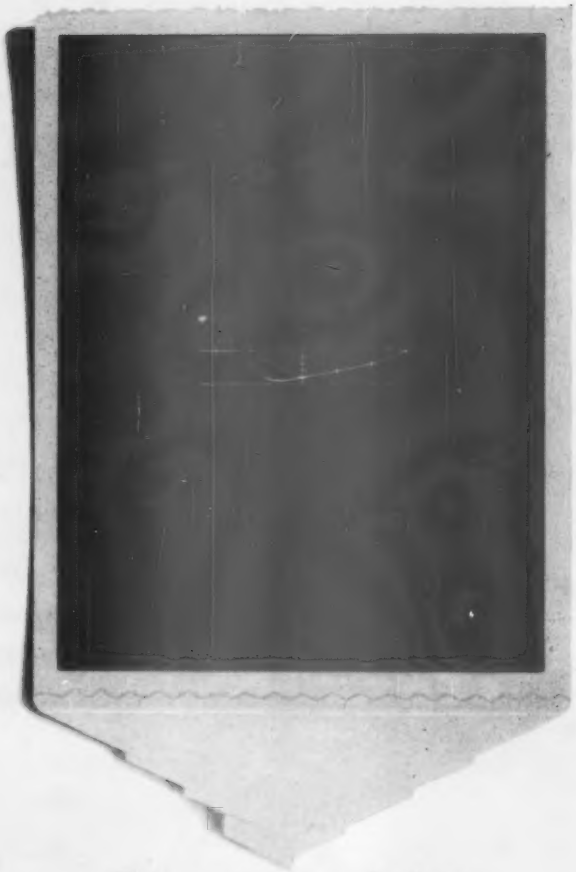

2 nanoseconds/cm: impossible to photograph until now

Polaroid has a new film that is so fast, it will reproduce scope traces that are almost invisible to the naked eye. The one above, a scintillation pulse, has never been photographed until now. Pulse duration was ten nanoseconds. Scope sweep speed was 2 nanoseconds/cm. *The new 10,000-speed Polaroid PolaScope Land film produced a finished usable print ten seconds after exposure.*

The maximum writing speed of the 10,000-speed film is about twice that of the Polaroid Land 3000-speed film, which is currently the standard for high speed photography. The new film not only gets "impossible" pictures, it also produces far better shots of slower pulses and steady state waveforms. Because of its high speed, less light is required; camera aperture and scope intensity can be reduced considerably, producing sharper pictures.

And besides oscillography, the PolaScope film opens up new possibilities in applications where light is at a premium, such as photomicrography and metallography. It is not suited, however, for pictorial work due to its high contrast and relatively coarse grain.

PolaScope film (designated Type 410) is packed twelve rolls to a carton. The price is actually lower than the 3000-speed film.

The film can be obtained through industrial photographic dealers. For the name of the dealer nearest you, write to Technical Sales Department, Polaroid Corporation, Cambridge 39, Massachusetts.

New Polaroid Land 10,000-speed film for oscillography.

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Midwest's unique method of obtaining specimens for destructive tests assures an extremely accurate and dependable basis for testing . . . without manufacturing expensive representative samples! Tension tests, corrosion tests, and photomicrographic studies are also performed on tangents cut from the finished fitting assuring dependability beyond comparison.

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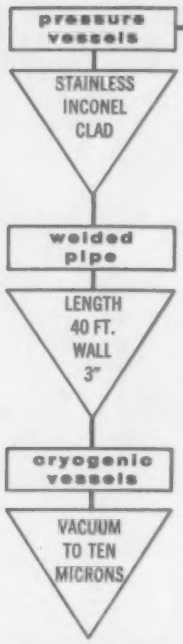

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Compact reactor projects at AI provide challenging opportunities for engineers and scientists interested in contributing to the practical utilization of space. Positions are available in the following areas:

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Systems and Control Analysis. Analysis and simulation of complete nuclear power plants to develop reliable, unattended, automatic control and instrumentation systems, including reactor kinetics, dynamics, stability and thermal characteristics and reliability analysis.

Reactor Analysis. Complete nuclear thermal and structural analysis including criticality, flux and power distributions and fuel cycle analysis.

Reactor Operations Evaluation. To establish detailed operating procedures, direct operations, and evaluate the performance characteristics of compact, lightweight nuclear systems for space applications.

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Please contact: Mr. C. L. Newton,
Personnel Office, Atomics International,
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All qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.

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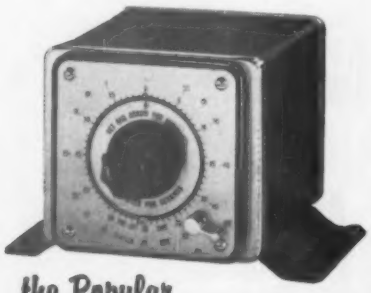

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Times and integrates to pre-set time 1 second to 60 minutes. Accuracy is plus or minus 0.1 second.

Easily and accurately set and read—continuously indicates elapsed time.

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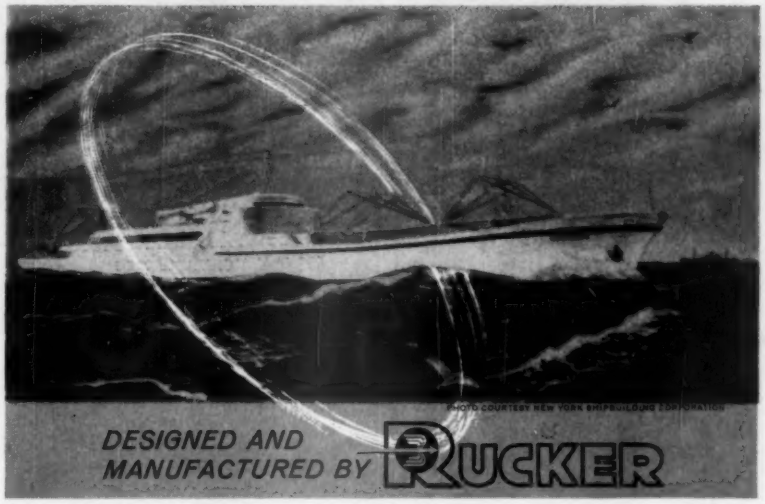

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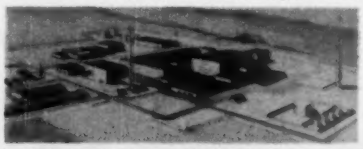

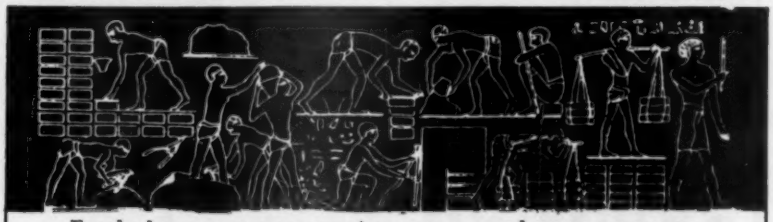

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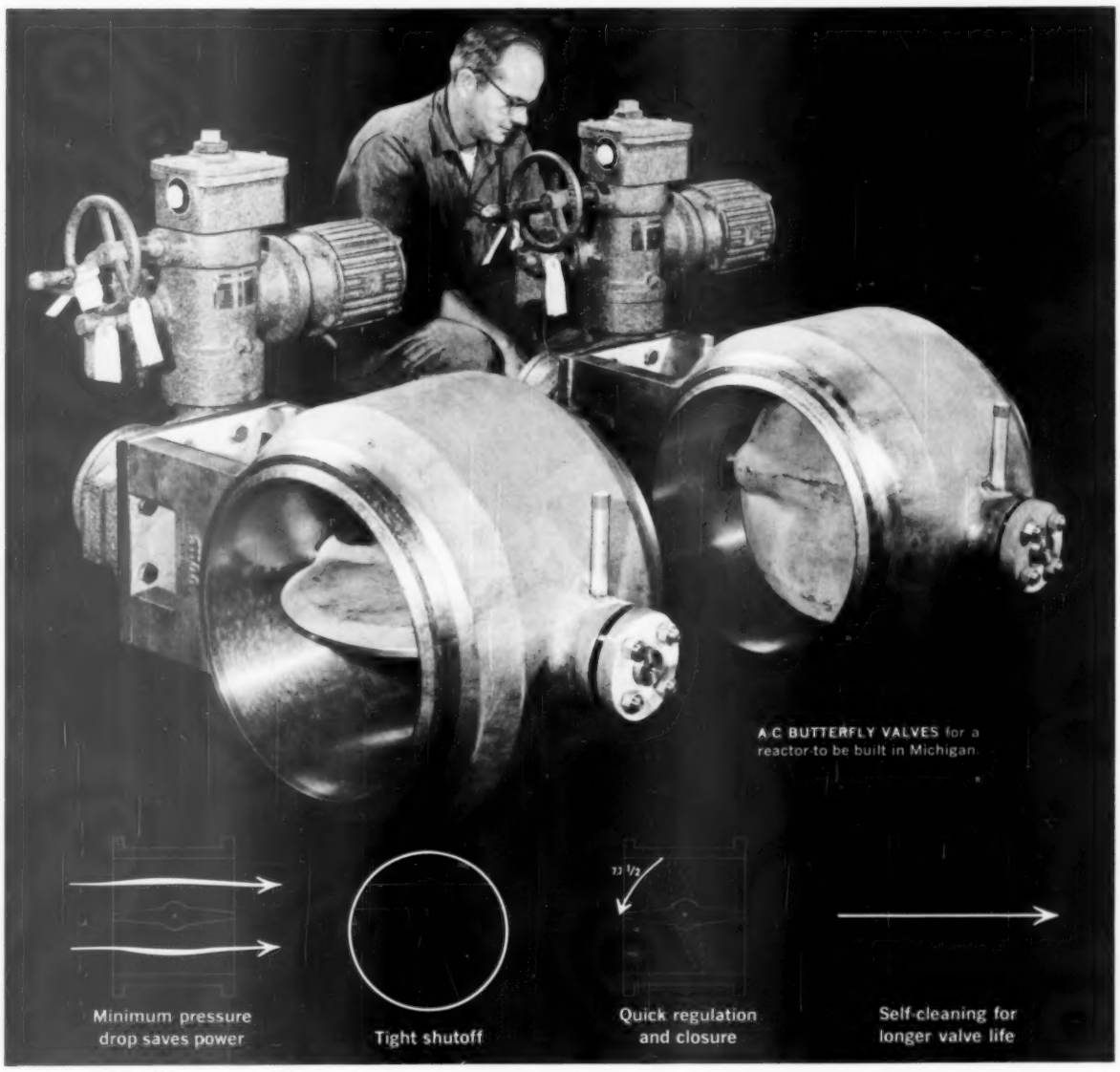

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A — preliminary design **B** — final design and shop drawing **C** — [redacted] inspection and testing **D** — installation at site

	ERR	CRBR	EGCR
fuel elements	ABCD	ABCD	A
control rods	ABCD	ABCD	A
control-rod drives	ABCD	ABCD	AB
core structure	ABCD	ABCD	AB
core vessel	ABCD	ABCD	A
shielding	ABCD	ABCD	
inst. & control systems	ABCD	ABCD	AB
fuel-handling system	ABCD	ABCD	AB
heat-removal system	ABCD	ABCD	A
hazards analysis	X	X	X
operator training	X	X	
startup & test operation	X	X	
site & feasibility studies			X

ERR: The Elk River Boiling Water Reactor, at Elk River, Minn., for the U. S. Atomic Energy Commission. Power level: 58,200 kwt. Completion: 1961.

CRBR: The Pathfinder Controlled Recirculation Boiling Water Reactor, at Sioux Falls, S. D., for the Northern States Power Co. Power level: 204,000 kwt.

EGCR: The Experimental Gas-Cooled Reactor, at Oak Ridge, Tennessee, for the U. S. Atomic Energy Commission. Power level: 85,000 kwt.

	AE-R2	RCN	RSARR
fuel elements	ABCD	ABCD	ABCD
control rods	ABCD	ABCD	ABCD
control-rod drives	ABCD	ABCD	ABCD
core structure	ABCD	ABCD	ABCD
core vessel	ABCD	ABCD	ABCD
shielding	ABCD	ABCD	AB
inst. & control systems	ABCD	ABCD	ABCD
fuel-handling system	ABCD	ABCD	ABCD
heat-removal system	ABCD	ABCD	A
hazards analysis	X	X	
operator training		X	
startup & test operation	X	X	
site & feasibility studies			X

AE-R2: The High-Flux Research Reactor, at Studsvik, Sweden, for Aktiebolaget Atomenergi, Stockholm. Power level: 30,000 kwt. Completed: 1960.

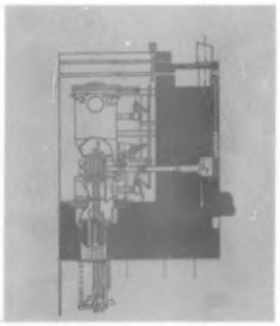
RCN: The High-Flux Research Reactor, at Petten, the Netherlands, for the Reactor Centrum Nederland. Power level: 20,000 kwt. Completion: 1961.

RSARR: The Republic of South Africa High-Flux Research Reactor, at Pelindaba, R.S.A., for the South African Atomic Energy Board. Power level: 20,000 kwt. Completion: 1963.

	UMR	AF-CRR	OCRR
fuel elements	ABCD	A	A
control rods	ABCD	A	A
control-rod drives	ABCD	A	A
core structure	ABCD	A	A
core vessel	ABCD	A	A
shielding	ABCD	A	A
inst. & control systems	ABCD	A	A
fuel-handling system	ABCD	A	A
heat-removal system	ABCD	A	A
hazards analysis	X	X	X
operator training	X		
startup & test operation	X		
site & feasibility studies		X	X

UMR: The University of Maryland Training Reactor, at College Park, Md. Power level: 10 kwt. Completed: 1960.

AF-CRR: The Air Force Cambridge Research Reactor, at Bedford, Massachusetts. Power level: 10,000 kwt. Completed: 1958.



OCRR: The U. S. Army Ordnance Corps Research Reactor, at Picatinny Arsenal, Dover, New Jersey Power level: 20,000 kwt. Completed: 1960.

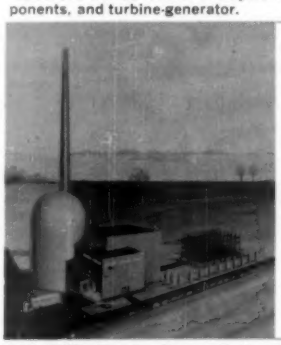
CNEN: The Uranium-Thorium Fuel Reprocessing Plant in Southern Italy, for the Comitato Nazionale per L'Energia Nucleare, will reprocess and fabricate fuel elements.

FERMI: As a member of APDA and PRDC, Allis-Chalmers participated in the design of the 300,000-kwt Enrico Fermi fast-breeder reactor, furnished reactor and system components, and turbine-generator.

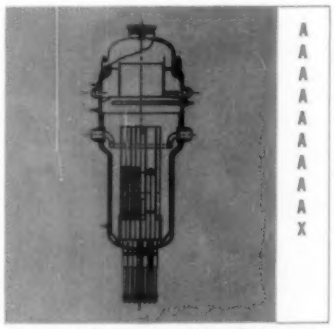
CERAMIC FUEL: The Ceramic Fuel Extrusion Program, for the U. S. Atomic Energy Commission. An R&D project concerning development of ceramic fuels in rod form.

										fuel elements
										control rods
										control-rod drives
										core structure
										core vessel
										shielding
										inst. & control systems
										fuel-handling system
										heat-removal system
										hazards analysis
										operator training
										startup & test operation
										site & feasibility studies
AB	AB	AB	AB	AB	AB	AB	AB	AB	X	
ABCD	ABCD	ABCD	ABCD	ABCD	ABCD	ABCD	ABCD	ABCD	X	
A	A	A	A	A	A	A	A	A	X	

ELPHR: The Experimental Low-Temperature Process Heat Reactor, for the U. S. Atomic Energy Commission. Power level will be 40,000 kwt.



LAC BWR: The La Crosse Boiling Water Reactor, at Genoa, Wisconsin, for the U. S. Atomic Energy Commission. Power level: 163,000 kwt. To be completed: 1965.



AKV: The AKV Boiling Water Reactor, at Simpevarp, Sweden, for the Aktiebolaget Atomkraftverk, Stockholm. Power level: 173,000 kwt. Completion: 1961.

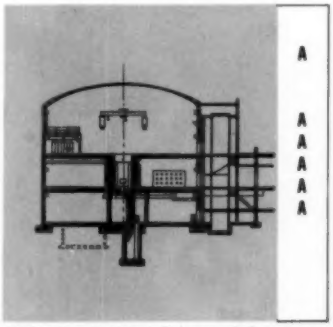
AF-NETR: The Nuclear Engineering Test Reactor, at Dayton, Ohio, for the United States Air Force. Power level will be 10,000 kwt.

ISPRA-1: The Heavy-Water Research Reactor, at Ispra, Italy, for the Comitato Nazionale per L'Energia Nucleare. Power level: 5,000 kwt. Completed: 1960.

MITR: The Massachusetts Institute of Technology Reactor, at Cambridge, Mass. Power level: 5,000 kwt. Completed: 1958.

										fuel elements
										control rods
										control-rod drives
										core structure
										core vessel
										shielding
										inst. & control systems
										fuel-handling system
										heat-removal system
										hazards analysis
										operator training
										startup & test operation
										site & feasibility studies
ABCD	ABCD	ABCD	ABCD	ABCD	ABCD	ABCD	ABCD	ABCD	X	
BCD	BCD	BCD	BCD	BCD	BCD	BCD	BCD	BCD		

BTLR: The Bell Telephone Laboratories Reactor, at Whippany, N. J. Power level: 5,000 kwt. Completed: 1957.



NBS: The National Bureau of Standards Reactor, at Gaithersburg, Md. Power level: 20,000 kwt. Completed: 1960.

										fuel elements
										control rods
										control-rod drives
										core structure
										core vessel
										shielding
										inst. & control systems
										fuel-handling system
										heat-removal system
										hazards analysis
										operator training
										startup & test operation
										site & feasibility studies
A	A	A	A	A	A	A	A	A	X	
A	A	A	A	A						

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spring-loaded hoist raises and lowers bell jar quickly and easily; locks solidly in any position.

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a Cenco 14 Hyvac Pump backing a fast 6" oil diffusion pump for rapid bell jar evacuation.

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the 19" pump plate contains 9 electrodes fed from either of two built-in power supplies—12 volt DC, 100 amps and 5000 volts AC, 30 ma, or conveniently fed from any external source.

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are made in various sizes to accommodate a desired number of fuel elements of common types, such as MTR. All containers comply with applicable regulations of the AEC and ICC.

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As a substantial aid to safe handling of all types of radioactive substances, the Ameray lead-lined fume hood is constructed with a sturdy steel frame and stainless steel interior and exterior facings.

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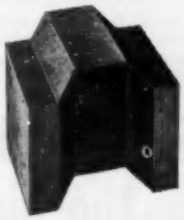
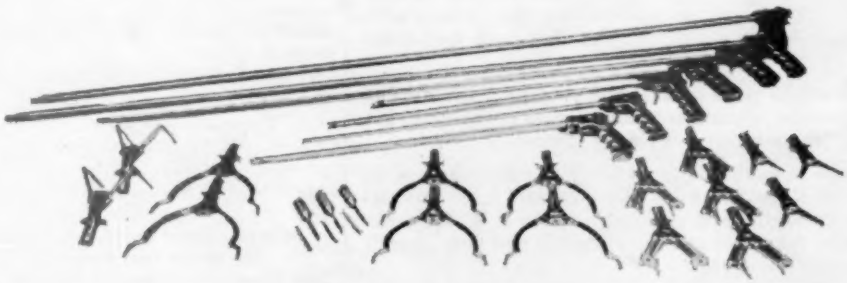


Cast in standard 6" x 8" x 8" size. Interlocking at all joints to afford maximum shielding. May be laid up dry or with mortar.
Available with special admixtures to increase density or neutron attenuation. Special sizes & shapes on application.



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Ameray remote handling tongs can be used in conjunction with ball joints, mounted in temporary lead-brick shields and lead-lined hoods or may be used independent of ball joints as hand tongs. They are the most economical handling equipment for use in Hot Laboratories, lead brick structures and junior caves.

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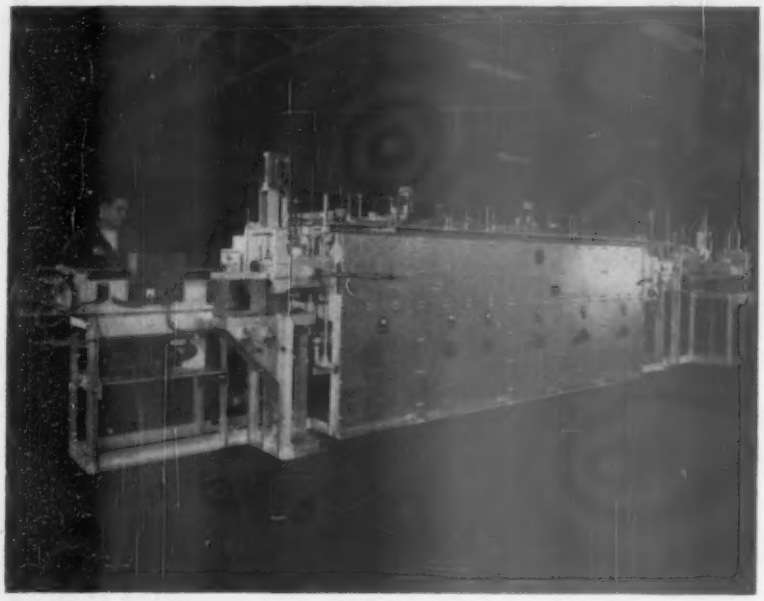
Processing ceramic fuel elements



This newly-designed Harper Pusher Furnace for sintering uranium oxide, is one of two units recently delivered to a long-time Harper user. Among its modern features is a sensing device for tray buckling which will stop the pusher and sound an alarm if there is a variation of 1/16" in movement of the first and last tray in the furnace.

Nucleonics men look to HARPER ... the pioneer

THE FIRST high temperature, continuous sintering furnace for the nuclear industry began producing UO_2 fuel pellets nearly six years ago. A molybdenum-heated, pusher type unit, it was designed and built *exclusively by Harper.*

MORE UO_2 SINTERING FURNACES have *since* been produced by Harper than by any other nucleonics equipment supplier. Throughout the industry, they've piled up an impressive success record.

A WIDE RANGE of furnaces is available from Harper for all stages of ceramic fuel element work: Research, pilot plant, or full scale production. Each unit is specifically engineered for these economic advantages: Low hydrogen consumption, purity of atmosphere, safe use, low overall operating cost.

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Sylvania-Corning Nuclear Corp.
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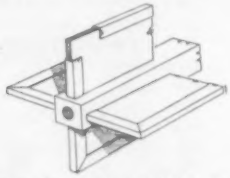
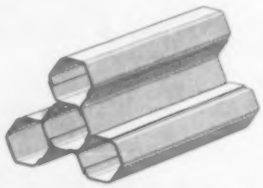
Boral is a uniform dispersion of boron carbide crystals in aluminum. Its high boron carbide content (up to 50%) enables it to absorb thermal neutrons without the production of hard gamma rays.

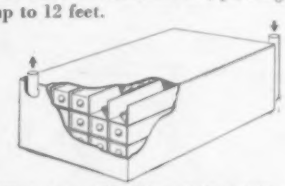
Boral Plate can be worked to meet the requirements of a wide range of shielding applications. It can be drilled, tapped, punched, sawed, sheared, formed, and welded. The accompanying sketches show typical designs and assembly methods.



Shut-down Control Rod for Reactors
Assembly of this unit is made by arc welding. All edges of Boral Plate are clad. The center bar is tapped to receive the threaded rod.



Storage Cells for Fresh Fuel
Cells are usually used in assemblies of several fuel units, encased in aluminum or stainless steel cylinders. The Boral shapes should have corner radii of ¾"; length can be up to 12 feet.



Water-cooled Boral-lined Case for Spent Fuel Elements
This Boral-lined aluminum case with egg-crate type separators for the transportation and storage of spent fuel units, is assembled from Boral Plate by arc welding.

Typical and Potential Applications
Reactor shields, neutron curtains, shutters for thermal curtains, safety rods, storage and shipping containers for fissionable material, fabricated boxes for radiation-sensitive devices, protective shields for easily activated components.

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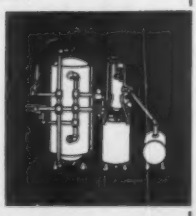

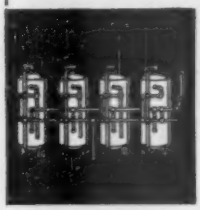

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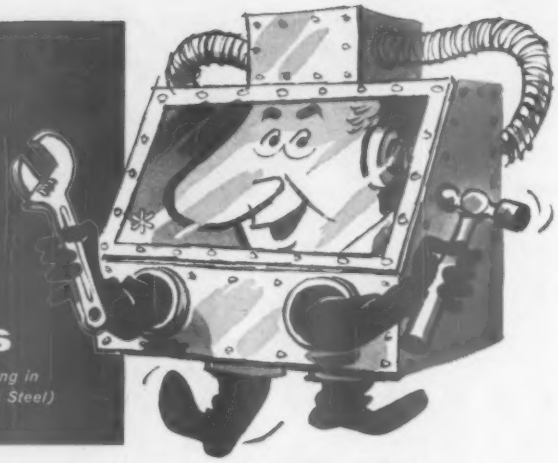

* Here's the real "inside dope" and we're not referring to the happy young fellow portrayed above. (He's not even a member of our organization)

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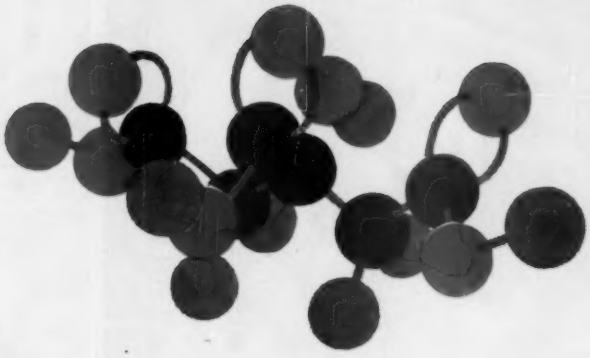

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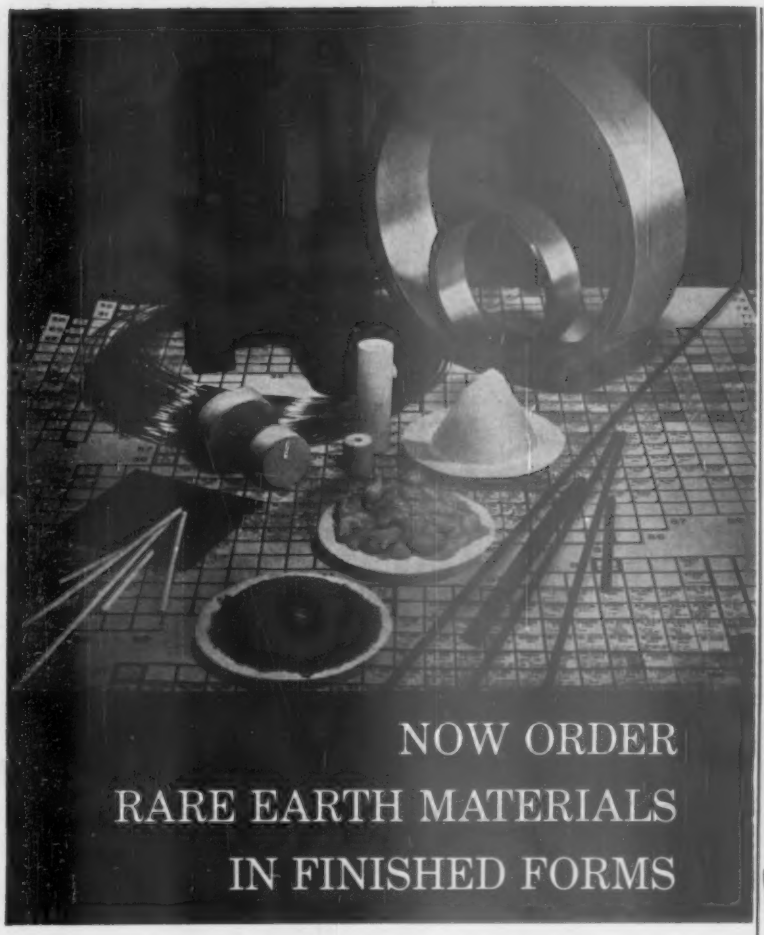

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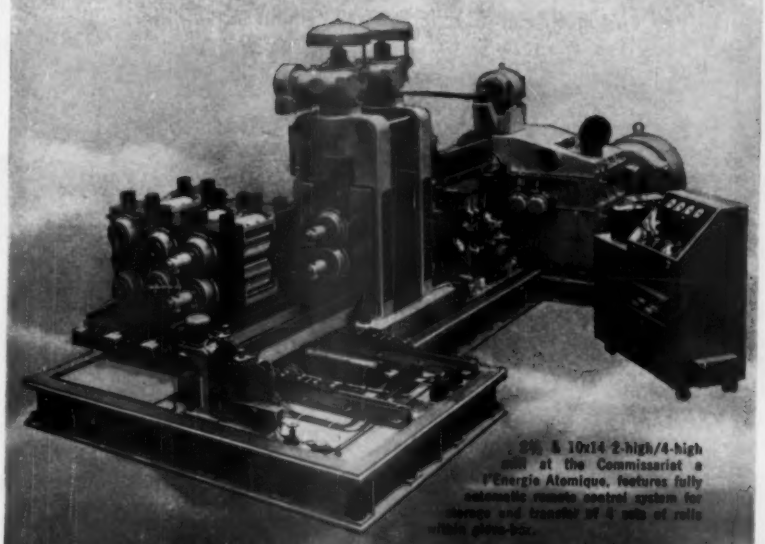

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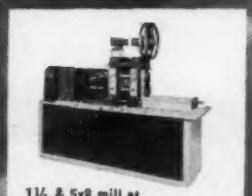

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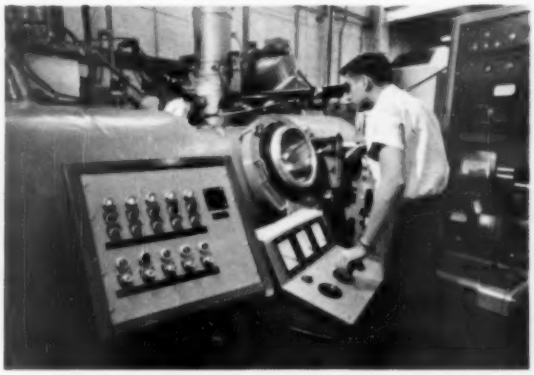

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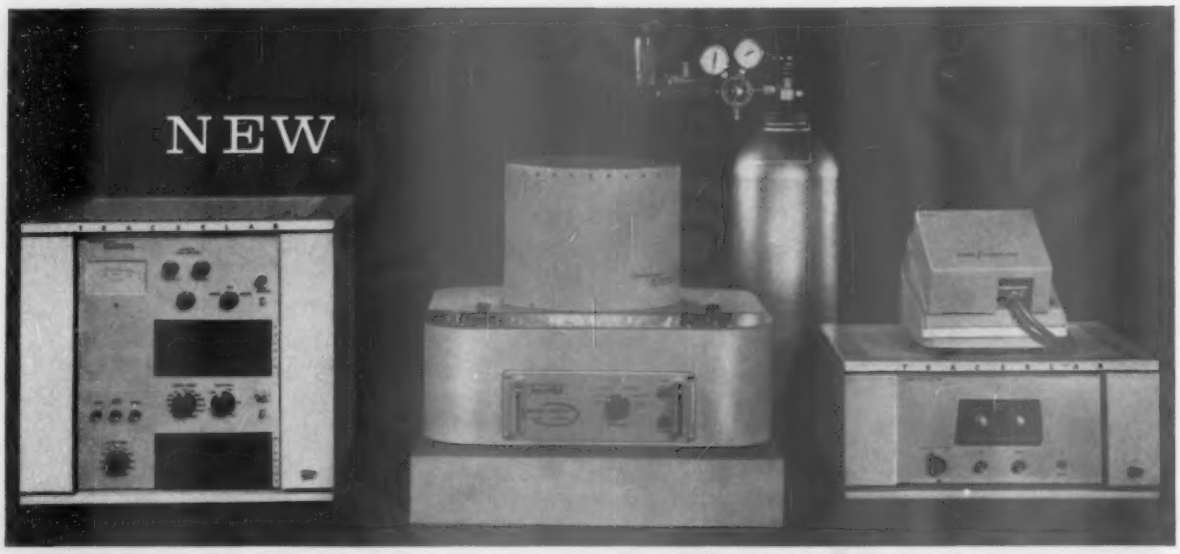

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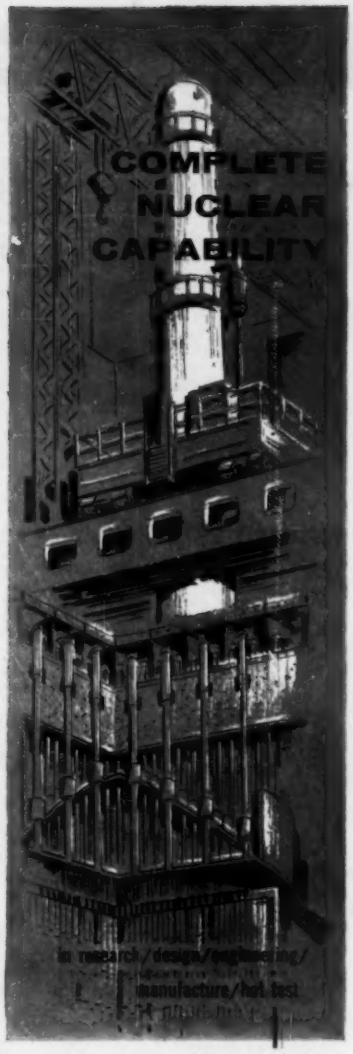

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D-10-12	1"	x12"	25.	30
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D-15-20	1½"	x20"	30.	35
D-15-34	1½"	x34"	30.	35
D-20-12	2"	x12"	30.	35
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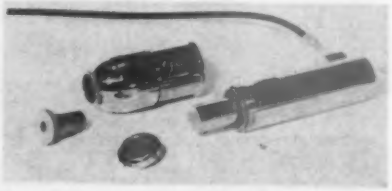

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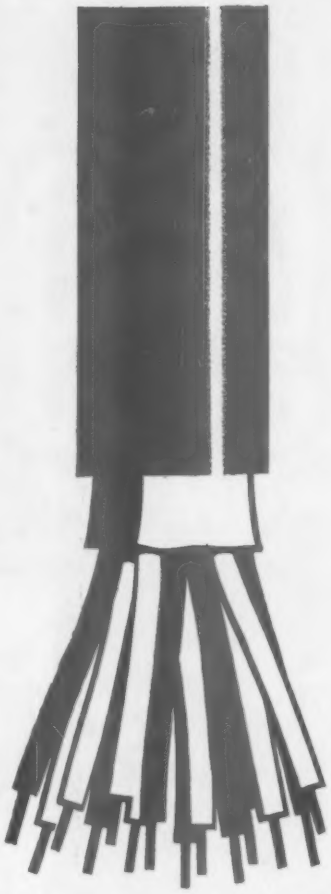

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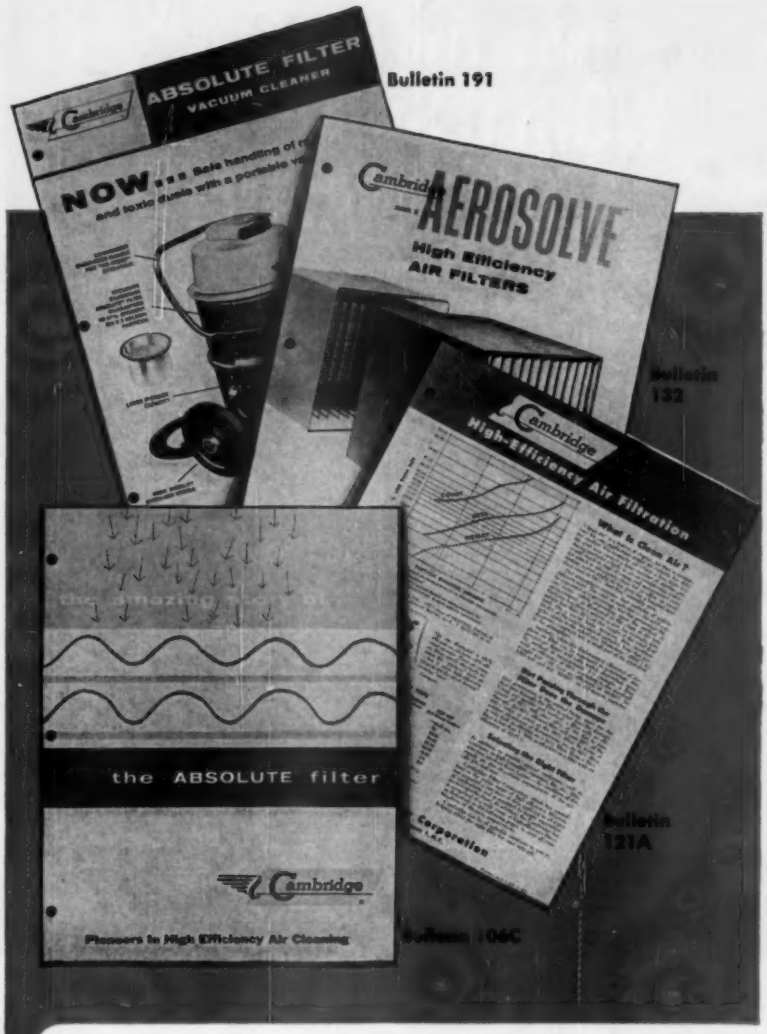

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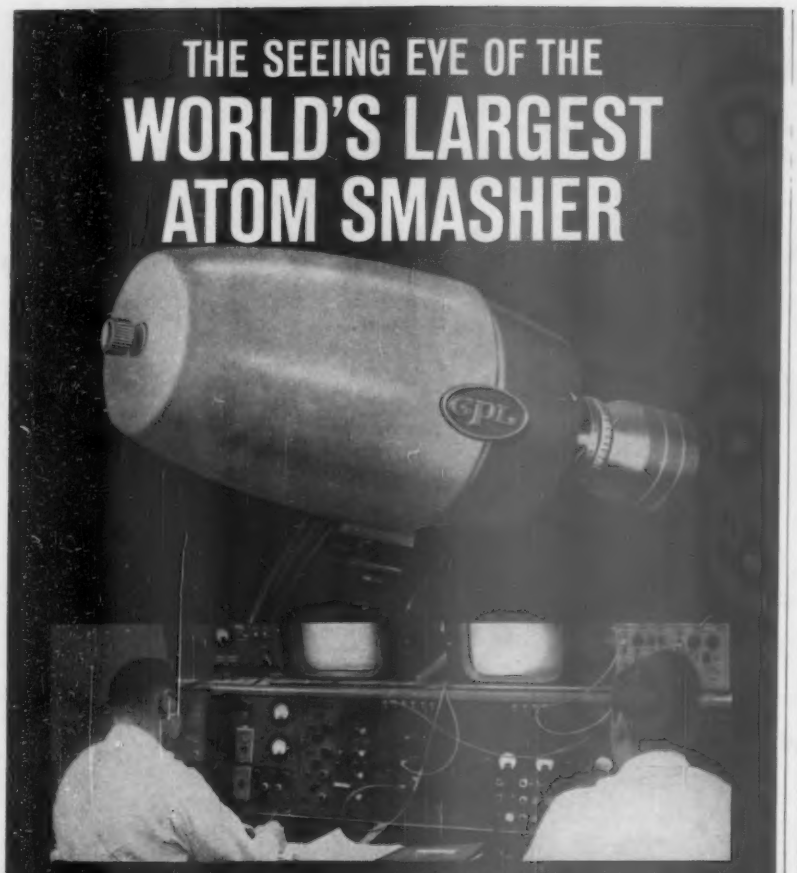

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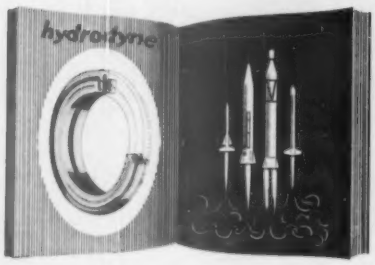

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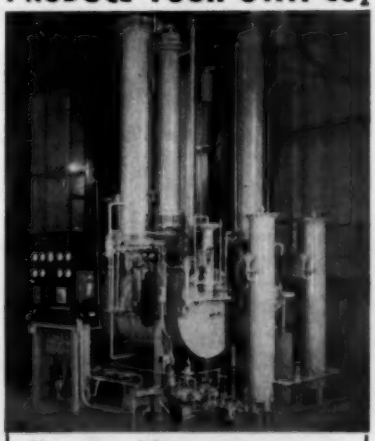

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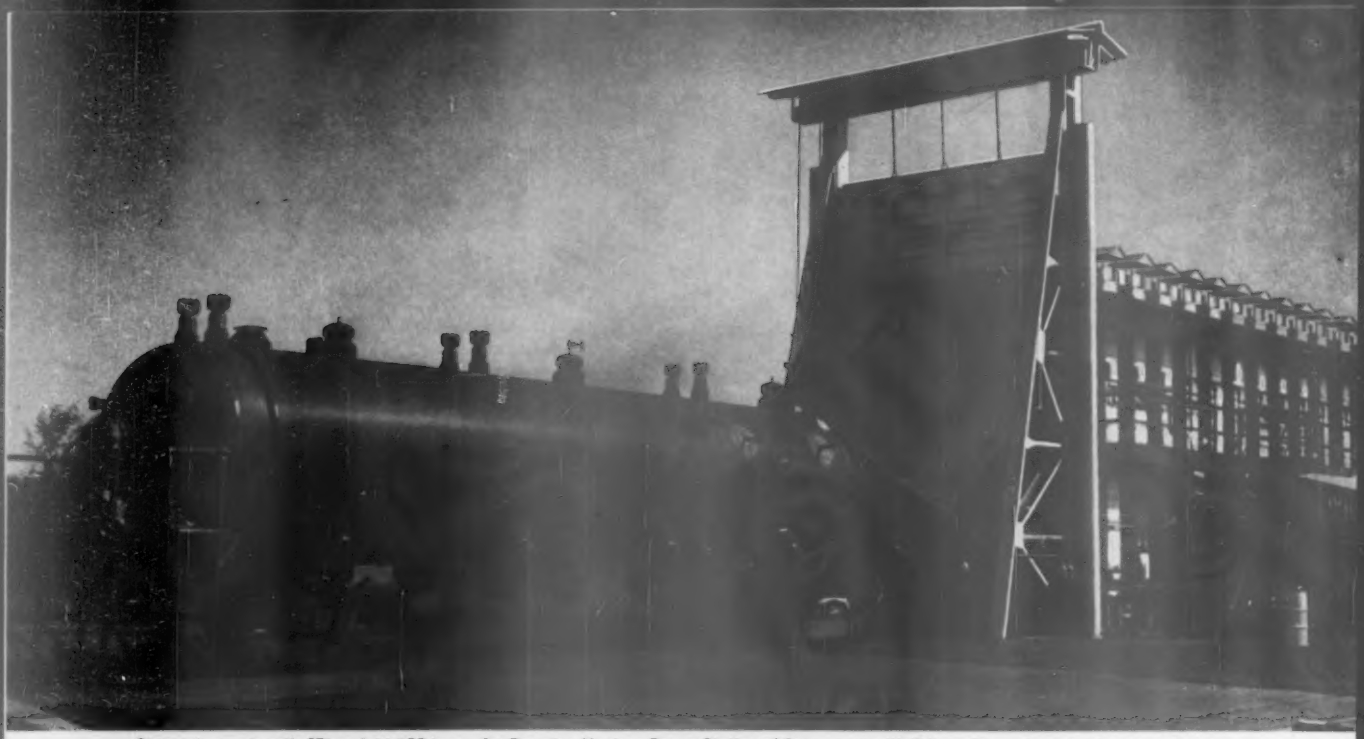

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0.008298	0.0453	0.9909	0.0271	2
0.008042	0.0298	0.9911	0.0264	4
0.007630	0.0343	0.9916	0.0251	12
0.007539	0.0235	0.9917	0.0247	6
0.007189	2.67/x	0.9921	0.0236	31
0.007048	0.0108	0.9922	0.0233	0
0.006875	0.0175	0.9925	0.0226	1
0.006775	0.0373	0.9925	0.0223	1

This manual is the second annual compilation of new reference data and techniques valuable to those in the nuclear field. The table of power reactors and experiments, a regular feature of the manual, is brought up to date this year with the most recent information on new and continuing projects. The manual also includes data, procedures and calculational techniques in nuclear engineering, applied radiation and health physics.

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REACTOR TABLE

Power Reactors and

This table is a quick source of readily-compared data on the essential features of heat-producing reactors past, present and on the way. These data show power reactor trends and make available that foundation of experience on which progress depends. The arrangement by type of coolant is intended to ease comparison of essential reactor features. The table includes some experimental reactors (such as PRTR, Spert, HTRE, SNAP and KIWI) that might not find their way onto lists restricted to utility-station power reactors but which are close relatives.

Following the main table is one of naval reactors.

The reactors in the main table are numbered, and an alphabetical list of the reactors at the end of the tables provides a quick means to find a reactor. Company, organization and laboratory abbreviations given in the "Designer/builder" and "Owner/operator" columns at the right of the

			Power (Mw)			Fuel					Fuel cladding		
Reactor, (no.), location		Date critical	Thermal	Net electrical	Equivalent efficiency (%)	Operating wt. (KgU)	Enr. (%)	Material	Shape	Center temp., max./avg. (°F)	Thick (mil)	Matl.	Shape
Pressurized-Water-Cooled Power Reactors													
1 PWR, Shippingport, Pa.	Seed-1	12/2/57–10/7/59	225	30	27	96.8	93	6.3U-Zr	plates	716/524	?	Zry-2	plates
	Blnkt-1			30 (60)		14.2	Natl.	UO_2	pellets	3,700/980	28	Zry-2	tubes
	Seed-2	4/12/60–8/16/61	Seed-3	(11/61–2/63)									
	Blnkt-1		Blnkt-1										
	Core-2	(63)	525	100(+50 equiv.)	29	?	Natl.&93	UO_2	rect. pellets	?/?	?	Zry-2	plates
2 Yankee, Rowe, Mass.		8/19/60	485	140	29	20,880	3.4	UO_2	pellets	3,911/1,600	21	348ss	tubes
3 BR-3, Mol, Belgium		(11/61)	40.9	10.5	25.7		3.7,4.4	UO_2	pellets	3,930/?	21	348ss	tubes
4 Indian Point, Buchanan, N. Y.		(1/62)	585	151(+104 oil sprht)	26	1,180U 17,200Th	93	UO_2-ThO_2	pellets	3,400/900	?	304ss	tubes
5 N.S. Savannah, cargo ship		(10/61)	69	16.5 equiv.	25	7,100	4.2,4.6	UO_2	pellets	3,310/1,800	32	304ss	tubes
6 Saxton, Pa.		(11/61)	20	?	?	?	5.7	UO_2	pellets	?/?	?	ss	tubes
7 SELNI, N. Italy		(12/63)	615 (843 potential)	175	28.4	?	3.0	UO_2	pellets	?/?	15	ss	tubes
8 So. Cal. Edison, Pendleton, Calif.		(64)	1,150	340	30	?	~2–3	UO_2	pellets	?/?	?	Zry or ss	tubes
9 SENA, Chooz, France		(65)	825	242	29.3	45,500	3.1	UO_2	pellets	?/?	?	ss	tubes
10 ELPHR, site not chosen		(?)	40	0	NA	3,200	3	UO_2	pellets	4,180/?	20	304Lss	tubes
11 SSPWR, site not chosen		(63)	61	22	36	?	?	?	?	?/?	?	?	?
12 PRTR, Richland, Wash.		11/21/60	70	0	NA	2,939 UO_2 8.6 Pu	Natl.	UO_2 1.8Pu-Al	pellets rods	2,680/2,150 ?/?	30 ?	Zry-2 Zry-4	tubes tubes
13 CVTR, Parr, S. C.		(6/62)	64.9	14.4(+10 oil sprht)	23	2,800	½ 1.5 ⅔ 2.0	UO_2	pellets	4,270/1,160	23	Zry-4	tubes
14 NPD, Ont., Canada		(61)	68.9	19.3	22		Natl.	UO_2	pellets	2,500/1,000	15	Zry-2	tubes
15 CANDU, Ont., Canada		(65)	608	203	20	41,600	Natl.	UO_2	pellets	3,500/2,550	15	Zry-4	tubes
16 R3, Agesta, Sweden		(12/62)	65	10(+55 stm)	—	15,700	Natl.	UO_2	pellets	1,400/600	27	Zry-2	tubes
17 R4, Marviken, Sweden		(early 67)	364	105	28.5	27,200	Natl.	UO_2	pellets	3,065/?	24	Zry-2	tubes
18 APPR-1[SM-1], Ft. Belvoir, Va.		(4/57)	10	1.86	18.6	24.18	93	25.95UO_2-ss-0.11B_4C cermet	plates	595/470	5	304Lss	plate
19 APPR-1A[SM-1A], Ft. Greeley, Alaska		(10/61)	20.2	1.64(+13.1 stm)	18.75	24.05	93	25.05UO_2-ss-0.11B_4C cermet	plates	610/487	5	304Lss	plates
20 PM-1, Sundance, Wyoming		(10/61)	9.37	1(+2.05 stm)	22.5	32	93	28UO_2-ss cerm	tubes	618/547	7.5	347ss	tubes
21 PM-2A, Camp Century, Greenland		10/2/60	10	1.56(+0.3 stm)	18.6	20.94	93	26UO_2-ss-0.13B_4C	plates	632/539	5	304Lss	plates
22 PM-3A, McMurdo, Antarctica		(3/62)	9.36	1.5	16	31.4	93	28UO_2-ss cerm	tubes	618/547	6	347ss	tubes
23 Portable, Obninsk, USSR		59	?	2	?	?	?	?	?	?/?	?	?	?
24 APS-1, Obninsk, USSR		5/54	30	5	16.5	?	5	U-9Mo-12Mg	tubes	?/?	?	ss	tubes
25 Lenin, (3), icebreaker, USSR		59	90×2	31 equiv.×2	24	170	5	UO_2	pellets	?/?	?	Zry	tubes
26 Siberia, (6), Troitsk, USSR		58, (60?)	?	100×6	?	182,000	Natl.	U	rods	?/?	?	Al	tubes
27 Rheinsberg, East Germany		(60?)	265	70	?	?	1.5	UO_2	pellets	?/?	?	Nb-Zr	?
28 Voronezh, (2), USSR		(61?)	760×2	210×2	26	36,000	1.5	UO_2	pellets	?/?	?	Zry	tubes
29 HWCTR, Sav. R. Plant, S. C.		(12/61)	61	0	NA	25.7	93	9.3U-Zr	tubes	1,110/840	15	Zry-2	tubes
30 MH-1A, mobile, barge, USA		(?)	45	10		?	?	?	rods	?/?	?	?	?
Boiling-Water-Cooled Power Reactors													
31 Borax-1, NRTS, Idaho		7/53–54	1.2	0	NA	4.8	90	13U-Al	plates	?/?	?	Al	plates
32 Borax-2, NRTS, Idaho		10/19/54–5/55	6.4	0	NA	5.8	90	13U-Al	plates	?/?	?	Al	plates
33 Borax-3, NRTS, Idaho		6/9/55–56	12	2.3	19	13.1	90	19&12U-Al	plates	?/?	?	Al	plates
34 Borax-4, NRTS, Idaho		12/56–58	20.5	2.4	12	18.8	90	UO_2-ThO_2	pellets	?/?	?	Al-1Ni	tubular plates

Experiments the World Around

table are also spelled out in an alphabetical list.

Terminology. A number in parentheses immediately after the reactor name indicates the number of identical reactors in that facility (if more than one). If the reactor has not gone critical, the currently scheduled date is given in parentheses. "Efficiency" is 100× net electrical power/gross heat developed by the reactor. "Loops/reactor" is the number of parallel external coolant loops removing heat from the reactor. Under fuel "material," a uranium-molybdenum alloy in which there is 10 wt% molybdenum is written "U-10Mo"; when there is 29 wt% UO_2 ceramic powder dispersed in type 304 stainless steel, the designation is "$29UO_2$-SS304." Fuel "shape" pertains to the fuel core itself without cladding. "NA" means not applicable. A question mark (?) means that the information was not available.

Fuel cladding			Reactor coolant					Steam system						
Surface temp., max./avg. (°F)	Moderator Wt. (tons)	Moderator Material	Loops/reactor	Material	Temp. (°F) in/out	Outlet psia	Reactor Δp (psi)	Temp. (°F)	Pressure (psia)	Flow (lb/hr)	No. turbines/reactor	Designer/builder	Owner/operator	Reactor
?/?	2,500 ft³ total	H_2O	3(+1 reserve)	H_2O	485/537	1,900	50 (4 loops)	486	600	833,000	1	Bettis	USAEC/DL	PWR
630/510		H_2O												
?/?	?	H_2O	4	H_2O	?/?	1,980	?	?	600	?	1			
653/530	2.8(core)	H_2O	4	H_2O	497/531	2,015	34	467	500	1,800,000	1	W	YAEC	Yankee
657/?	?	H_2O	1 out 2 in	H_2O	491/515	2,000	42.7	471	520	154,500	1	WAPD/BEEN	CEEN/BEEN	HB-3
605/517	?	H_2O	4	H_2O	486.5/519	1,500	44	449	420	2,200,000	1	B&W	ConEd	Indian Pt.
606/550	32.5	H_2O	2	H_2O	495/521	1,750	20.7	508–460	735–472	65,000	2	B&W	USAEC/SML	Savannah
642/585	?	H_2O	1	H_2O	520/540	2,000	15	462	475	97,000	1	WAPD/GA	SNEC	Saxton
650/?	?	H_2O	4	H_2O	500/545	2,150	?	486	500	2,350,000 (+1 for 543 Mw)	1	W	SELNI	SELNI
?/?	?	H_2O	5	H_2O	?/587	2,150	?	495	650	?	1	W	SCE	So. Cal. Ed.
?/?	?	H_2O	4	D_2O	514/572	2,150	?	464	498	?	2	W, ACEC, Framatome	SENA	SENA
546/?	20,000	H_2O	1	H_2O	400/430	970	4.4	380	196	136,800	0	A-C	USAEC/?	ELPHR
?/?	?	H_2O	1	H_2O	?/?	?	?	?	?	?	1	?	USAEC/?	SSPWR
610/565	25,000	D_2O	1	D_2O	478/530	1,065	100	430	410	214,000	0	HAPO	USAEC/HAPO	PRTR
?/?														
644/555	24	D_2O	1	D_2O	505/555	1,500	85	487	605	201,000	1	W,SW/DC	CVNPA	CVTR
555/530	125,000	D_2O	1	D_2O	485/530	1,036	100	448	415	300,000	1	CGE	AECL & OH	NPD
575/542	154	D_2O	1	D_2O	480/500	1,310	130	483	580	2,562,000	1	AECL/OH	AECL & OH	CANDU
450/?	50	D_2O	4	D_2O	401/428	480	8	385	200	24,000	1	ABA/ASEA	ABA/SEB&SSPB	R3
536/?	107	D_2O	6	D_2O	430/475	720	39	410	276	1,420,000	1	ABA/ASEA/Nohab	SSPB	R4
578/465	0.12	H_2O	1	H_2O	428/448	1,206	4.5	386	213	36,585	1	Alco	USA/Alco	APPR-1
578/476	0.12	H_2O	1	H_2O	423/433	1,200	5.0	382	200	70,000	1	Alco	USA	APPR-1A
588/532	?	H_2O	1	H_2O	447/479	1,300	8.5	417	300	34,332	1	Martin	USAEC/MC	PM-1
617/534	0.1	H_2O	1	H_2O	500/518	1,750	6.2	459	465	37,055	1	Alco	USA	PM-2A
588/532	?	H_2O	1	H_2O	447/479	1,300	9.0	417	300	35,777	1	Martin	USAEC/MC	PM-3A
?/?	?	H_2O	?	H_2O	?/?	1,710	?	536	290	?	?	USSR	USSR	Port. Russian
?/?	?	Graphite	1	H_2O	374/572	1,420	?	535	176	?	1	USSR	USSR	APS-1
?/?	?	H_2O	?	H_2O	478/615	2,850	?	590	430	?	1	USSR	USSR	Lenin
?/?	?	Graphite	?	H_2O	?/428	?	?	365	90?	?	½	USSR	USSR	Siberia
?/?	?	?	?	H_2O	482/513	1,470	?	243	426	426,220	?	USSR	USSR	Rheinsberg
?/?	?	H_2O	3	H_2O	482/527	1,470	?	445	426	1,000,000	3 total	USSR	USSR	Voronezh
660/570	4.5	D_2O	2	D_2O	417/462	974	26	396	220	187,600	0	EldP	USAEC/EldP	HWCTR
?/?	?	H_2O	1	H_2O	467/513	1,500	?	440	382	174,000	1	MC	USA/MC	MH-1A
?/?	?	H_2O	NA	H_2O	?/350	130	Low	Direct cycle		3,000	0	ANL	USAEC/ANL	Borax-1
419/?	?	H_2O	NA	H_2O	?/419	300	(sat.	Direct cycle		?	0	ANL	USAEC/ANL	Borax-2
?/?	?	H_2O	1	H_2O	?/419	300	circ.)	Direct cycle		?	1	ANL	USAEC/ANL	Borax-3
?/?	?	H_2O	1	H_2O	?/419	300		Direct cycle		?	1	ANL	USAEC/ANL	Borax-4

Reactor, (no.), location	Date critical	Power (Mw) Thermal	Power (Mw) Net electrical	Equivalent efficiency (%)	Fuel: Operating wt. (KgU)	Fuel: Enr. (%)	Fuel: Material	Fuel: Shape	Fuel: Center temp., max./avg. (°F)	Fuel cladding: Thick (mil)	Fuel cladding: Matl.	Fuel cladding: Shape
35 Borax-5, NRTS, Idaho	(11/61)	Boiler: Sprhtr: 35.7	3.5	NA	43–47 U[illegible]	5 93	UO_2 UO_2-304ss cerm	pellets plates	3,800/2,250 1,200/960	? ?	ss ss	tubes plates
36 EBWR, Argonne, Ill.	Core-1: 12/1/56–7/59 Core-1A: 4/60	20 90	4.6 5(+80 stm)	23 NA	5,534 5,806	Natl.&1.44 Natl., 1.44,93	U-5Zr-1.5Nb U-5Zr-1.5Nb& UO_2-ZrO_2-CaO	plates plates&rods	660/540 pl665/612 rd2,000/1,250	17 ?	Zry-2 Zry-2	plates plates &tubes
37 VBWR, Pleasanton, Calif.	Core-1: 8/5/57–10/59	50	5(+28 stm)	22.7	?	93	23–29UO_2 cerm	plates	?/?	?	304Lss	plates
	Core-2: 8/60	50	5(ltd. by T-G)	22.7	1,280	2.7&3.2	UO_2	pellets&pwdr	<5,000/2,200	?	Zry&ss	tubes
38 VSR, Pleasanton, Calif.	(Fall 62)	12.5	0	NA	2,120	3.6	UO_2	pellets	2,300/1,500	28	304ss	tubes
39 SL-1[ALPR], NRTS, Idaho	8/58–1/4/61	3	0.3(+0.4 stm)	NA	14	93	20U-Al-2Ni	plates	470/450	?	Al-1Ni	plates
40 Halden, Norway	Core-1: 6/59–	5	0	NA	?	Natl.	U metal	rods	?/?	?	Al	tubes
	Core-2: (4/62)	20	0	NA	1,500	1.5	UO_2	pellets	4,035/3,300	30	Zry-2	tubes
41 Dresden, Morris, Ill.	10/15/59	626	184	29.4	50,800	1.5	UO_2	pellets (Peak transient: 4,800/1,700)	3,100/1,280	32	Zry-2	tubes (0.567″ o.d.)
42 Kahl, W. Germany	11/60	60	15	25	5,545	2.3&2.6	UO_2	pellets	4,430/1,142	33	Zry-2	tubes
43 Elk River, Minn.	(10/61)	51.1 (+13 oilsprht)	20.5	22	194	93	180kgUO_2& 4,219kg ThO_2	pellets	2,820/?	?	304ss-B	tubes
44 Volga, Ulyanovsk, USSR	(61)	250	50	20	?	1.5	UO_2	pellets	?/?	?	Zry	tubes
45 Kurchatov APS, Urals (4)	(61)	Boiler: Sprhtr: 285×4	100×4	33	82,000 ?	1.5 1.3	U U	tubes tubes	?/? ?/?	? ?	ss ss	tubes tubes
46 Sioux Falls, S. D. (Pathfinder)	(6/62)	Boiler: 157.2 Sprhtr: 42.4	62	31	6,600 52	2.2 93	UO_2 20UO_2-ss cerm	pellets conc. tubes	4,500/1,730 1,410/680	26&28 7.5	Zry-2 ss	tubes tubes
47 Humboldt Bay, Eureka, Cal.	(Summer 62)	165	47	<31	13,800	2.6	UO_2	pellets	3,500/1,350	19	ss	tubes
48 Big Rock Pt., Charlevoix, Mich.	(Fall 62)	157	50	<31	7,700	3.2	UO_2	pellets	4,500/1,500	19	ss	tubes
49 Bonus, Punta Higuera, P.R.	(12/62)	Boiler: 37 Sprhtr: 13	16.3	33	2,540 1,760	Natl.&2.14 3.5	UO_2 UO_2	pellets (cyl.) pellets (cyl.)	4,500/2,100 4,000/2,000	25 18	Zry-2 348ss	tubes tubes
50 Japan PDR, Tokai Mura, Japan	(1/63)	45	12.5	28+	4,260	2.6 max.	UO_2	pellets	4,960/1,820	?	Zry-2	tubes
51 SENN, Sesuri, S. Italy	(1/63)	507.8	150	29.4	46,400	2.0 avg.	UO_2	pellets	4,200/1,490	30	Zry-2	tubes
52 LaCrosse BWR, Wisc.	(64)	?	50–75	?	8,600	?	?	?	4,100/?	?	?	?
53 AKV, Simpevarp Sweden	(65)	~170	~53	31	11,325	~2.8	UO_2	pellets	3,695/?	?	ss	tubes
54 Bodega Bay, Calif.	(late 65)	1,008	313		68,000	2.5	UO_2	pellets			ss	
55 Spert-1, NRTS, Idaho	7/11/55–?	0–510	0	NA	?	93	19UO_2-304ss-B	plates	varies	5	ss	plates
N.S. Savannah type:	3/21/61	0–1,000	0	NA	828	3.54	UO_2 rods	(6′×½″)	varies	28	304ss	tubes
56 Spert-2, NRTS, Idaho	2/60 H_2O;8/60 D_2O	0–1,000	0	NA	varies	93.5	12.5U-Al(1100)	plates	varies	20	Al-6061T6	plates
57 Spert-3, NRTS, Idaho	12/58	60	0	NA	37	93.2	18.8UO_2-304ss-B	plates	varies	5	304Lss	plates
		0–1,000	0	NA								
58 Spert-4, NRTS, Idaho	(10/61)	1	0	NA	~3.2	93.5	25U-Al(1100)	plates	varies	20	Al-6061	plates
		0–1,000	0	NA								
Homogeneous Reactors												
59 HRE-1, Oak Ridge, Tenn.	3/52–54	1	0.15	15	?	93	UO_2SO_4 in H_2O	liquid	?/?	?	347ss	vessel
60 HRE-2, Oak Ridge, Tenn.	12/57–2/61	5	0.30	NA	?	93	UO_2SO_4 in D_2O	liquid	?/?	?	Zry	vessel
61 LAPRE-1, Los Alamos, N. M.	2/56–1/57	2	0	NA	3.74	93.5	0.35*M* UO_2 in 17.5*M* H_3PO_4 (95%) in H_2O		NA	6	Au on ss ht.-exchngr tubes	
62 LAPRE-2, Los Alamos, N. M.	2/59–5/59	0.8	0	NA	6.73	93.5	0.507*M* UO_2 in 7.25*M* H_3PO_4 in H_2O		NA	6	Au on ss ht.-exchngr tubes	
63 Volga, Ulyanovsk, USSR	(?)	35	?	?	?	?	UO_2 in D_2O	liquid	?/?	?	?	?
Organic-Cooled Power Reactors												
64 OMRE, NRTS, Idaho	9/57	5–12	0	NA	27.4	93	25UO_2-ss cerm	plates	900/675	5	304ss	plates
65 OMR, Piqua, Ohio	(early 62)	45.5	11.4 (+sphrt)	25	6,900	1.94	U-3.5Mo-0.1Al	con. tubes(2)	727/625	35	Al can with spiral fins	
66 EOCR, NRTS, Idaho	(8/62)	40	0	NA	65	93	17UO_2-304ss-B	plates	900/650	5	ss	plates
67 OCDRE, Whiteshell, Man., Canada	(65+?)	40	0	NA	2,900	1.9 & natl.	UO_2	pellets	3,600/?	?	Al-M583	tubes
68 KBWP-OMR, Germany	(late 65)	475	159.3	33.5	38.6	2.6	U-10Mo	plates	850/750		Al	finned
Liquid-Metal-Cooled Power Reactors												
69 EBR-1, Mark-III NRTS, Idaho	11/57	Core: Blnkt: 1.4	0.2	14	53.8	93 Natl.	U-2Zr U-2Zr	rods rods	932/779 ?/?	? ?	Zry-2 Zry-2	tubes tubes
70 EBR-2, NRTS, Idaho	61	Core: Blnkt: 62.5	21	34	340	~30 0.22	U+5 fissium alloy U	pins pins	1,200/? ?/?	? ?	304ss 304ss	tubes tubes
71 DFR, Dounreay, Scotland	59	Core: 60 Blnkt: 12	15	21	?	30 Natl.	U U	tubes rods	?/? ?/?	Nb outer, V inner ?	ss	tubes tubes
72 Fermi, Monroe, Mich.	(early 62)	Core: Blnkt: 300	90	30	2,000	25.6 0.4	U-10Mo U-3Mo	pins rods	1,209/1,115 ?/?	? ?	Zr ss	tubes tubes
73 Rapsodie, Cadarache, France	(64)	10–20	0	NA	40 liters	20	10Mo-20Pu-70U	pins	880/?	?	ss&Nb	hex ?
74 BR-5, Obninsk, USSR	58	Core: 5	0	NA	?	NA	PuO_2	?	?/?	?	ss	?
75 BR-50, Obninsk, USSR	(?)	?	50	?	?	?	U-PU	?	?/?	?	?	?
76 BR-250, Obninsk, USSR	(?)	?	250	?	?	NA	PU	?	?/?	?	?	?

Fuel cladding				Reactor coolant					Steam system						
Surface temp., max./avg. (°F)	Moderator Wt. (tons)	Moderator Material	Loops/ reactor	Material	Temp. (°F) in/out	Outlet psia	Reactor Δp (psi)	Temp. (°F)	Pressure (psia)	Flow (lb/hr)	No. turbines/ reactor	Designer/ builder	Owner/ operator	Reactor
515/505	?	H_2O	1	H_2O	479/489	100–600	Low	850	540–600	55,800	1	ANL	USAEC/ANL	Borax-5
1170/935	?	H_2O		steam	489/850									
?/?	?	H_2O	1	H_2O	484/489	615	Low	Direct cycle		60,000	1	ANL	USAEC/ANL	EBWR
?/?	?	H_2O	1 (+ thermal)	H_2O	480?/?	?	Low	Direct cycle		300,000	1	ANL	USAEC/ANL	
?/?	0.34	H_2O	1	H_2O	540/545	1,015	?	Direct cycle		150,000	1	GE	GE	VBWR
1,300/555							5	Direct cycle		150,000	1			
1,250/950	?	H_2O	?	Steam	542/828	934	26	850	934	122,000	0	GE/GE & ESADA	GE/GE	VSR
460/440	?	H_2O	1	H_2O	420/422	315	Low	Direct cycle		9,000	1	ANL	USAEC/CE	SL-1
?/?	15	D_2O	1	D_2O	?/302	69	?	256	33	?	0	IA	IA	Halden
500/491	15	D_2O	1	D_2O	425–/446	426	?	360	142	77,162	0			
474/556	62 (in vessel)	H_2O	4	H_2O	504/547	1,017	7.5	Dual cycle		1,405,000		GE	CEC	Dresden
							Secondary →	467	500	1,191,000	1			
570/565	?	H_2O	1	H_2O	540/546	1,000	?	550	1,035	261,200		GE	VAK	Kahl
							Secondary →	495	550	221,900	1			
561/549	16.8	H_2O	2	H_2O	450/538	950	?	497	650	225,000	1	A-C	USAEC/RCAP	Elk River
							Sprhtr →	825	600					
?/?	?	H_2O	1	H_2O	?/590	1,410	?	Direct cycle		?	1	USSR	USSR	Volga
?/?	?	Graphite	4	H_2O	?/672	2,100	?	Direct cycle		?		USSR	USSR	Kurchatov
?/?				Steam	?/987	1,470	?	Direct cycle		?	1			
514/507	cold: 2.04	H_2O	1	H_2O	485/489	615	13.5	Direct cycle		616,125	1	A-C	NSP	Sioux Falls
1,400/675	hot: 0.61			Steam	489/825	550	65							
585/?	?	H_2O	1	H_2O	273/547	1,025	—	Direct cycle		575,000	1	GE	PG&E	Humboldt
600/560	?	H_2O	1	H_2O	533/550	1,050	9	Direct cycle		?	1	GE	CPC	Big Rock Pt.
640/570	10	H_2O	2	H_2O	532/540	965	7	Direct cycle		152,000	1	GNEC	USAEC/PRWRA	Bonus
1,200/870				Steam	540/900	890	75							
564/540	?	H_2O	1?	H_2O	520/530	905	—	530	495	?	1	GE	JAERI	Japan PDR
565/550	?	H_2O	2	H_2O	375/510 (fdwtr)	1,015 (recirc flow)	11.5	450	990	1,450,000	1	GE	SENN	SENN
600/590	?	H_2O	1	H_2O	293/?	?	1.5	?	?	616,000	1	A-C	USAEC/?	LaCrosse
602/540	?	H_2O	1	H_2O	?/?	?	—	Direct cycle		686,400	1	A-C	AKV	AKV
		H_2O	4	H_2O	?/554	1,000		Direct cycle			1	GE	PG&E	Bodega Bay
varies	?	H_2O	1	H_2O	—	atmos.	NA	NA	NA	NA	0	PPC	USAEC/ PPC	Spert-1
varies	3.2	H_2O	0	H_2O	—	atmos.	NA	NA	NA	NA	0			
varies	55	D_2O	1	D_2O	varies/400 max.	375 max.	varies	NA	NA	NA	0	PPC	USAEC/PPC	Spert-2
varies	5.9	H_2O	2	H_2O	Na/650 max.	2,515 max.	varies	NA	NA	NA	0	PPC	USAEC/PPC	Spert-3
varies	237	H_2O	1	H_2O	varies/130 max.	15	varies	NA	NA	NA	0	PPC	USAEC/PPC	Spert-4
?/?	?	fuel soln. H_2O	1	H_2O	?/482	1,000	?	385	200	?	1	ORNL	USAEC/ORNL	HRE-1
?/?	?	fuel soln. D_2O	1	Fuel soln.	?/572	2,000	?	470	520	?	1	ORNL	USAEC/ORNL	HRE-2
800/NA	?	H in fuel soln.	1	H_2O	100/600	3,600	300	800	3,600	6,000 H_2O	0	LASL	USAEC/LASL	LAPRE-1
								(Design only; steam never made)						
800/NA	?	H in fuel soln.	1	H_2O	435/744	650	150	Heat dumped		2,370	0	LASL	USAEC/LASL	LAPRE-2
?/?	?	D_2O	?	D_2O	?/?	?	?	?	?	?	?	USSR	USSR	Volga
800/650	?	Terphenyl	1	Terphenyl	600/613	210	7	Heat dumped			0	AI	USAEC/AI	OMRE
713/605	54 in system	Coolant	1	Mixed polyphenyls	518/575	79	27	550	440	150,000	Existing	AI	USAEC/Piqua	OMR
850/625	100	Santowax-R	1	Santowax-R	500/525	120	40	No steam generated			0	FC&CFB	USAEC/PPC	EOCR
900/?	18.9	D_2O	<6	70% Santowax-OM70 &30% radiolytic tars	545/700	165	103	No steam generated			0	Canadian GE	AECL	OCDRE
735/650	400	Terphenyls	3	Terphenyls	572/624	135	47	590	923	2,020,000	2	AI-BBC/AI-BBC	KBWP	KBWP-OMR
?/?	0	None	1	NaK	446/612	15	8	539	405	3,600	1	ANL	USAEC/ANL	EBR-1
747/617														
950/?	0	None	1	Na	700/900	~60	41	850	1,250	248,000	1	ANL	USAEC/ANL	EBR-2
?/?							?							
?/?	0	None	24	Na-30K	?/663	45	?	525	200		1	UKAEA	UKAEA	DFR
?/?					?/617	45	?							
1,139/1,051	0	None	3	Na	550/800	20	106	742	585		1	APDA	PRDC	Fermi
?/?					550/746	30								
752/?	0		2	Na	440–842 / 644–1,000	14.7	?	None	None		0	CEA	CEA	Rapsodie
?/?	0	None	1	Na	707/840	?	?	?	230		0	USSR	USSR	BR-5
?/?	0	None	?	Na	?/896	?	?	780	412		?	USSR	USSR	BR-50
?/?	0	None	?	Na	?/1,000	?	?	?	?		?	USSR	USSR	BR-250

Reactor, (no.), location	Date critical	Power (Mw) Thermal	Power (Mw) Net electrical	Equivalent efficiency (%)	Fuel: Operating wt. (KgU)	Fuel: Enr. (%)	Fuel: Material	Fuel: Shape	Fuel: Center temp., max./avg. (°F)	Fuel cladding: Thick (mil)	Fuel cladding: Matl.	Fuel cladding: Shape
77 SRE, Santa Susana, Calif. Core-1:	4/23/57–7/26/59	20	6.2	31	?	2.8	U	rods	?/?	10	304ss	tubes
Core-2:	9/5/60	20	6.2	31	94.15+1,144.kgTh	93.13	Th-7.6U	rods	1,205/992	10	304ss	tubes
78 SGR, Hallam, Nebraska	(12/61)	240	76	32	27,600	3.6	U-10Mo	rods	1,250/?	?	ss	tubes
79 Volga Centre Sta., Ulyanovsk, USSR	(?)	?	50	?	?	?	?	?	?/?	?	?	?
80 SNAP-2, Santa Susana, Cal.	9/59	0.05	0.003	6	?	?	U-Zr-H	cylinders	?/?	?	Hastelloy-N	tubes
81 SNAP-8, Santa Susana, Cal.	(?)	0.3–0.6	0.03–0.06	10	?	93	U-Zr-H	cylinders	?/?	?	?	?
82 SNAP-10A, Santa Susana, Cal.	8/60	0.015	0.003	2	?	93	U-Zr-H	disks	?/?	?	Hastelloy	?
83 LAMPRE-1, Los Alamos, N. M.	3/61	1	0	NA	24 Pu	NA	PU-2.5Fe	molten	~1,700/~1,435	?	Ta+0.1W	cans
Gas-Cooled Power Reactors												
84 Calder Hall, (4), Cumberland, England	A: 5/22/56 B: 12/56 C: 3/58; D: 12/58	220×4	37.5×4	18.5	127,000×4	Natl.	U metal	rods	1,040/1,004	80	Magnox-A12	tubes
85 Chapelcross, (4), Dumfriesshire, Scotland	A: 11/58 B: 6/59 C: 9/59; D: 12/59	220×4	37.5×4	18.5	127,000×4	Natl.	U metal	rods	1,040/1,004	59	Magnox-12	tubes
86 Berkeley, (2), Gloucestershire, England	A: 8/27/61 B: (3/62)	555×2	137.5×2	24.8	232,000×2	Natl.	U metal	rods	~1,022/?	?	Mg-alloy	tubes, finned
87 Bradwell, (2), Essex, England	A: 8/19/61 B: (3/62)	531×2	150×2	28.2	235,000×2	Natl.	U metal	rods	?/?	?	Mg-alloy	tubes, finned
88 Hunterston, (2), Ayrshire, Scotland	A: (11/62) B: (6/63)	560×2	163×2	28.8	251,000×2	Natl.	U metal	rods	?/?	80	Magnox	tubes, finned
89 Hinkley Point, (2), Somerset, England	(6/62)	960×2	250×2	26	376,000×2	Natl.	U metal	rods	1,040/?	?	Magnox-A12	tubes, finned
90 Trawsfynydd, (2), Merionethshire, N. Wales	A: (4/63) B: (12/64)	870×2	250×2	28.7	336,000×2	Natl.	U metal	rods	1,085/?	?	Magnox-A12	tubes, finned
91 Latina, (1), Foce Verde, Italy	(63)	705	200	28.4	262,500–268,600	Natl.	U metal	rods	1,085/1,193	79	Magnox-A12	tubes, finned
92 Japan GCR, (1), Tokai Mora, Japan	(3/65)	585	157	26.8	166,000	Natl.	U metal	tubes	1,135/1,035	70	Magnox	tubes, finned
93 Dungeness, (2), Kent, England	(64)	835×2	275×2	32.9	300,000×2	Natl.	U metal	rods	1,135/1,035	?	Mg-alloy	tubes, finned
94 Sizewell, (2), Suffolk, England	(66)	947.7×2	290×2	30.5	321,000×2	Natl.	U metal	rods	1,068/?	?	Magnox-A12	tubes, finned
95 Oldbury, (?), Glos., England	(?)	?	550	?	?	Natl.	U metal	?	?/?	?	?	
96 G1, Marcoule, France	1/7/56	38	−7	NA	100,000	Natl.	U metal	rods	662/?	63	Mg-Zr	tubes, finned
97 G2, Marcoule, France	7/26/58	200	25	12.5	120,000	Natl.	U metal	rods	1,035/?	59	Mg-0.7Zr	tubes, finned
98 G3, Marcoule, France	3/59	200	27	14	120,000	Natl.	U metal	rods	1,035/?	59	Mg-0.7Zr	tubes, finned
99 EDF-1, Chinon, France	(summer 62)	300	68	22.7	140,000	Natl.	U-Mo	tubes	?/?	?	Mg alloy	tubes
100 EDF-2, Chinon, France	(summer 63)	792	198	25	250,000	Natl.	U-Mo	tubes	?/?	?	Mg alloy	tubes
101 EDF-3, Chinon, France	(late 65)	1,193	375	30.7	409,000	Natl.	U-Mo	tubes	1,100/?	?	Mg alloy	tubes
102 EL-4, Brittany, France	(64 or 65)	250	78.5	31	10,200–16,700	1.25&natl.	UO_2	pellets	3,600/2,670	?	steel&Be	tubes
103 EDF-4, Finistere, France	(6/66)	Core 1: 260	80	31	?	Enriched	UO_2	pellets	?/?	?	ss	tubes
		Core 2: 260	80	31	?	Natl.	UO_2	pellets	?/?	?	Be	tubes
104 HWGCR, Bohunice, Czechoslovakia	(65)	590	150 gross	<25	?	Natl.	U metal	rods	?/?	?	Be-Mg alloy	tubes
105 GCRE, NRTS, Idaho	2/23/60	Core 1: 2.2	0	NA	46	93.15	$30UO_2$-316ss cermet	curved plates	2,400/1,775	6	318ss	curved plates
	9/61	Core 2: 2.2	0	NA	46	93.15	UO_2&$70UO_2$-BeO	pellets	2,400/1,775	30	Hastelloy-X	tubes
106 ML-1, NRTS, Idaho	3/61	3.3	0.33	10	53	93.15	UO_2&$70UO_2$-BeO	pellets	2,900/?	30	Hastelloy-X	tubes
107 AGR, Windscale, England	(early 62)	100	27	27	11,600	2.5(ss) 1.8(Be)	UO_2	pellets	3,100/?	15 40	ss Be	tubes tubes
108 EGCR, Oak Ridge, Tenn.	(late 62)	84.98	29.5 (incl. sphit)	25.9	11,200	2.46	UO_2	annular bushings	3,000/1,460	20	304ss	tubes
109 EBOR, NRTS, Idaho	(spring 63)	10	0	NA	143	70	UO_2 in BeO	pellets	1,910/1,600	20	Hastelloy-X	tubes
110 Dragon, Winfrith, Dorset, England	(63)	20	0	NA	22.2+135Th$^{\pm m}$	90	UC_2-ThC_2-C	rings	2,880/2,280	?	graphite	tubes
111 HTGR, Peach Bottom, Pa.	(6/64)	115	40	34	185	93	UC_2-ThC_2-C	rods	2,700/2,100	375	graphite	tubes
112 UHTREX, Los Alamos, N. M.	(5/64)	3	0	NA	7	93	UC_2 or UC in graphite	tubes	<3,200/<2,700	0	none	none
113 AVR, Juelich, W. Germany	(63)	48	15	31	?	20	UC in graphite	balls	?/?	?	graphite	—
114 HTRE-1, NRTS, Idaho	1/56–12/56	17–20	0	NA	?	93.5	UO_2 in Ni-Cr	cylinders	?/?	?	Ni-Cr	—
115 HTRE-2, NRTS, Idaho	2/57	?	0	NA	?	93.5	UO_2 in Ni-Cr	cylinders	?/?	?	Ni-Cr	—
116 HTRE-3, NRTS, Idaho	10/58	32	0	NA	?	93.5	UO_2 in Ni-Cr	cylinders	?/?	?	Ni-Cr	—
117 KIWI-A, Jackass Flats, Nev.	7/1/59	?	0	NA	?	93	U-graphite dispersion	plates	?/?	?	graphite	plates
118 KIWI-A′, Jackass Flats, Nev.	7/8/60	?	0	NA	?	93	Improved	?	?/?	?	?	?
119 KIWI-A3, Jackass Flats, Nev.	10/19/60	?	0	NA	?	93	?	?	?/?	?	?	?
120 KIWI-B-1A, Jackass Flats, Nev.	(~11/61)	?	0	NA	?	93	?	?	?/?	?	?	?
121 TORY-2A, NTS, Nev.	?	?	0	NA	?	93	?	?	?/?	?	?	?
122 Wylfa Head, Wales	(67)	?	800	?	?	?	?	?	?/?	?	?	?

Fuel cladding								Steam system						
			Reactor coolant											
Surface temp., max./avg. (°F)	Moderator Wt. (tons)	Moderator Material	Loops/reactor	Material	Temp. (°F) in/out	Outlet psia	Reactor Δp (psi)	Temp. (°F)	Pressure (psia)	Flow (lb/hr)	No. turbines/reactor	Designer/builder	Owner/operator	Reactor
?/?	40	Graphite	1	Na	500/960	18	3	825	615		1	AI	USAEC/AI	SRE
1,000/794	40	Graphite												
960/813	170	Graphite	3	Na	610/945	15	11	825	815		1	AI	USAEC/CPPD	SGR
?/?	?	Graphite	?	Na	?/932	118	?	932	1,320		1	USSR	USSR	Volga
?/?	?	ZrH in fuel	1	NaK	?/1,200	?	?	Hg in boiler			?	AI	USAEC/AI	SNAP-2
?/?	?	ZrH in fuel	1	Na-30K	?/1,300	?	?	Hg in boiler			?	AI	USAEC-NASA/AI	SNAP-8
?/?	?	ZrH in fuel	0	None	1,000 at rctr sfc	?	?	Direct thermoelec cnvrtrs			0	AI	USAEC/AI	SNAP-10A
1,155/1,075	0	None	1	Na	1,040/1,040	~12	~1	Radiator heat dump			0	LASL	USAEC/LASL	LAMPRE-1
815/785	715×4	Graphite	4	CO_2	284/637	95.4	4.6	597 ?	210 ?	114,000 41,700	2	UKAEA	UKAEA	Calder Hall
815/785	715×4	Graphite	4	CO_2	284/637	95.4	4.6	597 ?	210 ?	114,000 41,700	2	UKAEA	UKAEA	Chapelcross
896/?	2,200×2	Graphite	8	CO_2	320/553	140	?	604 ?	310 72	? ?	2	NPG	CEGB	Berkeley
788-/? 842	2,200×2	Graphite	6	CO_2	356/734	142	5	703 ?	770 210	170,800 87,500	3	NPG	CEGB	Bradwell
?/?	1,425×2 (core)	Graphite	8	CO_2	400/764	160	3.9	725 685	594 162	1,220,000 560,000	3	UPC	SSEB	Hunterston
806/?	2,730×2	Graphite	6	CO_2	356/705	195	4.5	685	655	460,000/ boiler	3	EEC-B&W-TW	CEGB	Hinkley Pt.
824/?	?	Graphite	6	CO_2	395/750	247	6	720 695	978 313	1,700,000 920,000	4	UPC	CEGB	Trawsfynydd
904/818	1,475	Graphite	6	CO_2	356/734	192	5	705	745 202	1,370,000 606,000	3	NPG	SIMEA	Latina
910/850	1,090 (core)	Graphite	4	CO_2	398/739	208	10	707 680	877 265	1,043,000 580,000	2	UPC	JAPCo.	Japan GCR
828/?	2,140×2	Graphite	4	CO_2	482/770	283	?	739 638	1,410 550	1,348,900/ turbine	2	NPG	CEGB	Dungeness
849/?	2,460×2	Graphite	4	CO_2	417/770	282	11.1	736	692	750,000/ boiler	1	EEC-B&W-TW	CEGB	Sizewell
?/?	?	Graphite	?	CO_2	?/?	?	?	?	?	?	?	?	CEGB	Oldbury
572/?	1,320	Graphite	1	Air	64 ± 18/275	14.2	4.3	248	17.1	?	1	CEA	CEA	G1
780/?	1,320	Graphite	1	CO_2	284/535	213	8.5	509	145	?	1	CEA	CEA	G2
780/?	1,320	Graphite	1	CO_2	284/572	213	8.5	535	145	?	1	CEA	CEA	G3
750/?	1,100	Graphite	1	CO_2	293/660	377	?	650 420	306.7 61	633,000 235,000	1	EDF	EDF	EDF-1
775/?	1,800	Graphite	4	CO_2	388/688	365	?	645 645	473 126	151,000 825,000	2	EDF	EDF	EDF-2
815/?	3,300	Graphite	4	CO_2	465/730	305	?	752	761	4,550,000	2	EDF	EDF	EDF-3
1,200/1,070	100	D_2O	1	CO_2	500/932	855	4.2	905	1,180	755,000	1	CEA	CEA	EL-4
?/?	?	D_2O	?	CO_2	?/932	870	?	?	853	?	?	CEA&EDF	CEA	EDF-4
?/?	?	D_2O												
?/?	?	D_2O	3	CO_2	212/797	885	?	752	410	210,000	?	USSR&CSR	CSR	HWGCR
1,700/1,320	200 lb	H_2O	1	N_2+0.5 O_2	800/1,200	192	18	N_2-H_2O-air dump		63,000N_2	0	AGN/AGC	USAEC/AGN	GCRE
1,700/1,350	3,750	H_2O	1	N_2+0.5% O_2	791/1,200	291	22	Direct cycle		89,640N_2	1	AGN/AGC	USAEC/AGN	ML-1
1,200/?	265	Graphite	4	CO_2	952/1,050	265	17.5 max.	860	650–675	78,000	1	UKAEA	UKAEA	AGR
1,500/1,100	157	Graphite	2	He	510/1,050	303.2	10.3	903	1,310	255,340	1	KE,A-C, ORNL/HKF	USAEC/TVA	EGCR
1,510/1,365	4 (incl. refl.&diluent)	BeO	1	H_2	750/1,300	1,088	32	Heat dumped			0	GA	USAEC/GA	EBOR
1,850/1,420	2.4	Graphite	6	He	662/1,382	291	5	Heat dumped			0	OEEC	OEEC/UKAEA	DRAGON
2,100/1,550	23	Graphite	2	He	660/1,380	350	3.4	1,000	1,450	555,000	1	GA	HTRDA/PE	HTGR
NA	5	Graphite	1	He	≤1,600/2,400	500	0.3	Air-cooled heat dump			0	LASL	USAEC/LASL	UHTREX
?/?	?	Graphite	In reactor	He	?/1,562	147	?	941	1,029	?	1	BBC/Krupp	AVR	AVR
?/?	?	H_2O	1	Air	?/1,282– 1,380	47	?	Direct air cycle		?	?	GEANPD	USAEC/GE	HTRE-1
?/?	?	H_2O	1	Air	various	47	?	Direct air cycle		?	?	GEANP	USAEC/GE	HTRE-2
?/?	?	ZrH	1	Air	?/1,335–1,600	46	?	Direct air cycle		?	?	GEANP	USAEC/GE	HTRE-3
?/?	?	Graphite	Open	H_2	?/?	?	?	Open-cycle rocket		?	0	LASL	USAEC/LASL	KIWI A
?/?	?	?	Open	H_2	?/?	?	?	Open-cycle rocket		?	0	LASL	USAEC/LASL	KIWI-A'
?/?	?	?	Open	H_2	?/?	?	?	Open-cycle rocket		?	0	LASL	USAEC/LASL	KIWI-A3
?/?	?	?	Open	H_2	?/?	?	?	Open-cycle rocket		?	0	LASL	USAEC/LASL	KIWI-B-1A
?/?	?	?	Open	Air	?/?	?	?	Open-cycle ramjet		?	0	LRL	USAEC/LRL	TORY-2A
?/?	?	?	?	?	?/?	?	?	?		?	?	?	CEGB	Wylfa Head

NAVAL REACTORS—Land-Based Prototypes

Reactor	Year of entry into operation	Location	Type	No. of loops	Designer & prime contractor	Purpose
United States						
S1W	1953	NRTS	PWR	2	W	Experimental submarine
S1G	1955–57	W. Milton, N. Y.	Sodium	2	GE	Experimental submarine
S2G (dismantled)	1957	W. Milton, N. Y.	Sodium-beryllium	2	GE	Experimental submarine
S3G	1958	W. Milton, N. Y.	PWR	2	GE	Large submarine
S5G (NCR)	1964	NRTS	PWR (nat. circulation)	2	GE	Improved submarine
S1C	1959	Windsor Falls, Conn.	PWR	2	CE	Small submarine
A1W (2 units)	1958–59	NRTS	PWR	4 each	W	Large surface ship
D1G	1961	W. Milton, N. Y.	PWR	3	GE	Small surface ship
Britain						
S5W (modified)	1962 (?)	Dounreay prototype	PWR	2 (?)	Rolls-Royce	First British-designed naval reactor
France						
	1963–64	Cadarache prototype	PWR	2 (?)	CEA	First French naval reactor

NAVAL REACTORS—Seagoing Units

Reactor	Year of entry into operation	Ships using	Type	No. of loops	Designer & prime contractor	Ship type
United States						
S2W	1955	Nautilus	PWR	2	W	Experimental submarine
S3W	1957–58	Skate, Sargo	PWR	2	W	Fleet submarine
S3W	1959	Halibut	PWR	2	W	Guided-missile submarine
S4W	1958–59	Swordfish, Seadragon	PWR	2	W	Fleet submarine
S2G (removed)	1957	Seawolf	Sodium-beryllium	2	GE	Experimental submarine
S2W-A (replaced S2G)	1960	Seawolf	PWR	2	W	Experimental submarine
S5W	1959–61	Skipjack & 5 sisters	PWR	2 each	W	Fast attack
	1961	Thresher & 16 sisters	PWR	2 each	W*	Improved fast attack
	1959	Geo. Washington & 4 sisters	PWR	2 each	W	Polaris, Class I
	1961	Ethan Allen & 4 sisters	PWR	2 each	W	Polaris, Class II
	1963	Lafayette & 18 sisters	PWR	2 each	W†	Polaris, Class III
S4G	1959	Triton (2 reactors)	PWR	2 each	GE	Large radar-picket sub
S2C	1960	Tullibee	PWR	2	CE	Small killer sub
A2W	1961	Long Beach (2 reactors)	PWR	2 each	W	Cruiser
	1961	Enterprise (8 reactors)	PWR	4 each	W	Carrier
D2W	1962	Bainbridge (2 reactors)	PWR	3 each	GE	Destroyer
	1965	1 sister of Bainbridge	PWR	3 each	GE	Destroyer
Britain						
S5W (U. S. supplied)	1961 (?)	HMS Dreadnought	PWR	2	W	First British N-sub
	1954 (?)	HMS Valiant	PWR	2(?)	Rolls-Royce	First British-designed seagoing reactor

* One of these Westinghouse-designed reactors to have GE as prime contractor.
† Five of these Westinghouse-designed reactors to have GE as prime contractor.

NOTES:

All **U. S.** Navy propulsion reactors are of the pressurized-water type, use Zircaloy-clad 93%-enriched U-Zr-alloy plates (except S3G and S4G, which have fuel in the form of "ribbons"), have H_2O as moderator and coolant. The reactor coolant of early submarine reactors was at about 475°F and 2,000 psia; steam was at about 475°F and 215 psia.

France is planning three nuclear submarines with the first to be ready for trials in 1967–68.

Italy has a study program underway at CAMEN (Military Nuclear Energy Center) at Livorno.

Russia has for four years been reported building six nuclear submarines, in October 1961 gave the first indirect evidence—"eyewitness" accounts of cruises aboard a Russian nuclear sub appearing in a number of Russian newspapers—that the first, at least, was now operational.

Company, Laboratory and Organization Abbreviations

ABA	AB Atomenergi
A-C	Allis-Chalmers Mfg. Co.
ACEC	Ateliers de Constructions Electriques de Charleroi
AECL	Atomic Energy of Canada Ltd.
AEG	Allgemeine Elektricitat Gesellschaft
AEI	Assoc. Electrical Industries Ltd.
AEPSC	American Electrical Power Service Co.
AGC	Aerojet-General Corp.
AGIP	Associazione Gas e Petrolio Italiana
AGN	Aerojet-General Nucleonics
AI	Atomics International Div., N. American Aviation, Inc.
AKV	AB Atomkraftverk
Alco	Alco Products, Inc.
ANL	Argonne National Laboratory
APC	Atomic Power Constructions Ltd.
APDA	Atomic Power Development Assoc.
ASEA	Allmana Svenska Electriska AB
B&W	Babcock & Wilcox Co.
BBC	Brown, Boveri & Cie.
BDB	B. D. Bohna
BEEN	Bureau d'Etude de l'Energie Nucleaire
Bettis	Westinghouse Electric Corp., Bettis Atomic Power Lab.
CE	Combustion Engineering Inc.
CEA	Commissariat a l'Energie Atomique
CEC	Commonwealth Edison Co.
CEEN	Centre d'Etude de l'Energie Nucleaire
CEGB	Central Electricity Generating Board
CFB	C. F. Braun Co.
CGE	Canadian General Electric Co. Ltd.
CNRN	Comitato Nazionale Ricerche Nucleari
ConEd	Consolidated Edison Co.
CPC	Consumers' Power Co.
CVNPA	Carolinas-Virginia Nuclear Power Assoc.
DC	Daniel Construction Co.
DL	Duquesne Light Co.
EDF	Electricité de France
EEC	English Electric Co. Ltd.
EIdP	E. I. duPont de Nemours
FC	Fluor Corp. Ltd.
GA	Gilbert Assoc., Inc.
GE	General Electric Co.
GEC	General Electric Co. Ltd. of England
GNEC	General Nuclear Engineering Corp.
HAPO	General Electric Co., Hanford Atomic Products Operation
IA	Instittut for Atomenergi
JAPC	Japan Atomic Power Co.
JT	John Thompson Nuclear Energy Co. Ltd.
KAPL	Knolls Atomic Power Laboratory
KBWP	Kernkraftwerk Baden-Wurttemberg Planungsgesellschaft m.b.H.
LASL	Las Alamos Scientific Laboratory
LRL	Lawrence Radiation Laboratory, Livermore
MC	The Martin Co.
NPPC	Nuclear Power Plant Co. Ltd.
NRTS	National Reactor Testing Station
NSP	Northern States Power Co.
OEEC	Organization for European Economic Cooperation
OH	Ontario Hydro
ORNL	Oak Ridge National Laboratory
PE	Philadelphia Electric Co.
PGE	Pacific Gas & Electric Co.
PH	Paul Hardiman, Inc.
Piqua	City of Piqua, Ohio
PPC	Phillips Petroleum Co.
PRDC	Power Reactor Development Co.
PRW	Puerto Rican Water Resources Authority
SACM	Societe Alsaciene de Constructions Mechaniques

SC	Simon-Carves Ltd.
SCE	Southern California Edison Co.
SEB	Stockholm Elec. Board
SELNI	Societa Elettronucleare Italiana
SENA	Société d'Energie Nucléaire Franco-Belge des Ardennes
SENN	Societa Elettronucleare Nationale
SIMEA	Societa Italiana Meridionale per l'Energia Atomica
SML	States Marine Lines
SNEC	Saxton Nuclear Engineering Corp.
SORIN	Societa Ricerche Impianti Nucleari
SOSEB	South of Scotland Electricity Board
S-R	Stearns-Rogers Mfg. Co.
SSPB	Swedish State Power Board
SW	Stone & Webster
TC	Technical Constructors
TNPG	The Nuclear Power Group
TW	Taylor Woodrow Atomic Power Construction Co. Ltd.
UKAEA	United Kingdom Atomic Energy Authority
UPC	United Power Co. Ltd.; includes APC, GCE, SC
USA	U. S. Army
USAEC	United States Atomic Energy Commission
USAF	U. S. Air Force
USN	United States Navy
W	Westinghouse
WAPD	Westinghouse Atomic Power Dept.
YAEC	Yankee Atomic Electric Co.

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Reactor-Coolant Properties

by LEON GREEN, *Brookhaven National Laboratory, Upton, New York*

THE PHYSICAL, chemical and nuclear properties listed in these tables permit comparison of the advantages and disadvantages of materials currently being considered as coolants* for nuclear reactors. The bibliography lists sources of more detailed information.†

Unless otherwise specified the properties listed are at 1,000°F. They cover the following coolant criteria (*2*):

1. Low melting point
2. High boiling point
3. Low cost
4. Compatibility with conventional materials
5. Large heat-transfer coefficient
6. Small pumping cost
7. Thermal stability (all the materials considered in this table have good thermal stability at practical operating temperatures)
8. Radiation stability
9. Low induced radioactivity

For thermal reactors

10. Low neutron-absorption cross section
11. Moderating power

For fast reactors

12. Low inelastic-scattering cross section (inelastic scattering cross section is defined as the total cross section minus the absorption cross section)

Coolant materials are divided into four classes in the table: (1) aqueous and organic liquids, (2) gases, (3) liquid metals and (4) fused inorganic liquids. For each class only the properties of interest are included; for example, boiling point and surface tension are omitted for gases.

In addition to the basic properties, a number of combined parameters that represent important criteria for selecting coolants are presented in the table. Unfortunately no one parameter is applicable to all four classes of materials—even within a class no one factor can adequately establish the superiority of one material over another. Two attempts have been made (*3, 4*) to combine nuclear and physical properties into a single parameter applicable to all or to a group of materials, but the results are of questionable value because of the many simplifying assumptions used. In fact both reports contain errors in deriving the basic equation and also arithmetic errors in determining the final values of the factors.

The following generalizations can be applied in using the table:

1. The Prandtl number indicates the value of the heat-transfer coefficient. Small values are generally desirable.

2. Since the coolant volume usually takes up a large fraction of the core volume, neutron absorption is an important consideration. In thermal reactors the capture cross section at 0.025 ev should be low if the coolant is to occupy a large volume of the core.

In fast reactors coolant materials with a low inelastic scattering cross section are desirable because it is important that the core contain a minimum of material tending to degrade the fast-fission spectrum. Inelastic-scattering cross-section values were selected at 2 Mev because this value is, in most cases, fairly close to the average over the fast spectrum.

3. The slowing-down power and the moderating ratio are naturally important where the coolant is also the moderator. High values are desirable for thermal reactors.

4. The pumping-power requirement for heat transport is an important economic consideration and directly depends on the coolant properties. A useful factor for evaluating pumping-power requirements for liquid coolants is

$$\mu^{0.2}/\rho^2 C_p^{2.8}$$

(See nomenclature list for definitions of terms.) A small value for this factor indicates a small pumping-power

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* Li^7 is omitted because much of the data is still classified.

† An earlier tabulation, similar to the one presented here, was prepared by W. S. Scheib, Jr. (*1*).

Nomenclature

A	atomic wt. (gm)	W	pumping-power factor
C_p	heat capacity (Btu/lb/°F)	W/W_{He}	pumping-power ratio relative to helium
$C_p\mu/k$	Prandtl number	μ	viscosity (lb/hr/ft)
D	diameter	ρ	density (lb/ft³)
D/D_{He}	diameter ratio relative to helium	σ_c, 0.025 ev	capture cross section for 0.025-ev neutrons (barns)
k	thermal conductivity (Btu/hr/ft/°F)		
S	specific activity (curies/gm) = $0.6\phi\sigma(1 - e^{-0.693/T})/3.7 \times 10^{10}A$	Σ_a	macroscopic absorption cross section (cm^{-1})
		Σ_s	macroscopic scattering cross section (cm^{-1})
t	irradiation time	ϕ	flux (cm^{-2} sec^{-1})
T	half-life	ξ	average loss in natural logarithm of neutron energy due to scattering collision
T_b	boiling point (°R)		
T_m	melting point (°R)	$\mu^{0.2}/\rho^2 C_p^{2.8}$	measure of pumping-power requirement for liquid coolant
T_w	working temperature (°R)		
$\frac{T_b - T_m}{T_w}$	measure of useful temp. range of liquid coolant	$\xi\Sigma_s$	slowing-down power
		$\Sigma_s\xi/\Sigma_a$	moderating ratio

Aqueous and Organic Liquids*

	Water	*Heavy water*	*Diphenyl*	*Dowtherm-A*	*Santowax R*
General physical properties					
Formula	H_2O	D_2O	$C_{12}H_{10}$	75 % $C_{12}H_{10}O$ + 25 % $C_{12}H_{10}$	$C_{18}H_{14}$
Molecular wt.	18.016	20.029	154.2	166.2 (effective)	230.2
Density (lb/ft³)	42.4 [600°F][a] (*8*)	46.2 [600°F][ab] (*11*)	46.4 [675°F] (*13*)	46.6 [675°F] (*14*)	52.29 [675°F] (*13*)
Viscosity (lb/hr/ft)	0.20 [600°F][a] (*8*)	0.220 [600°F][ab] (*11*)	0.353 [675°F] (*13*)	0.7986 [675°F] (*14*)	0.630 [675°F] (*15*)
Surface tension (dynes/cm)	12.0 [600°F][a] (*9*)	10.0 [600°F][ab] (*9*)	10.5 [675°F][c]	8.4 [675°F][d] (*14*)	18.0 [675°F] (*15*)
Vapor pressure (mm Hg)	7.98×10^4 [600°F][b] (*10*)	8.22×10^4 [600°F] (*12*)	4679 [675°F] (*13*)	4645 [675°F] (*14*)	650 [675°F] (*13*)
Thermal properties					
Melting point (°F)	32 (*12*)	39 (*13*)	156 (*13*)	53.2 (*13*)	293 (*13*)
Boiling point (°F)	212 (*12*)	214(*13*)	49 (*13*)	496 (*15*)	687-784 (*13*)
Heat capacity (Btu/lb/°F)	1.54 [600°F][a] (*8*)	1.68 [600°F][ae]	0.637 [675°F] (*13*)	0.675 [675°F] (*15*)	0.539 [675°F] *15*)
Thermal conductivity, (Btu/hr/ft/°F)	0.294 [600°F][a] (*8*)	0.294 [600°F][ae]	0.0763 [675°F] (*13*)	0.098 [675°F] (*15*)	0.064 [675°F] (*15*)
Heat of fusion (Btu/lb)	143.5 [15°C] (*17*)	143.5 [15°C] (*18*)	51.4 (*13*)	64.0 [53.2°F] (*15*)	37.8[116]
Heat of vaporization (Btu/lb)	1060 [15°C] (*17*)	1035 [15°C] (*18*)	137 [491°F] (*13*)	125 [495°F] (*15*)	121.5 [675°F] (*19*)
Prandtl number	1.048 [600°F][ab]	1.257 [600°F][ab]	2.947 [675°F][b]	5.5006 [675°F][b]	5.,299 [675°F][b]
Nuclear properties					
σ_c, 0.025 ev (barns)	0.66 (*9*)	0.0011 (*9*)	3.3[f] (*9*)	3.3[f] (*9*)	4.6 (*9*)
n,γ daughter, half-life	—	—	none	—	none
n,γ daughter activity (Mev)	small amount	small amount	none	small amount	none
Radiation damage	low	low	low	low	low
ξ	0.925 (*9*)	0.504 (*9*)	0.812 (*9*)	NA[g]	NA
General properties					
Cost ($/lb)	—	28 (*20*)	0.16 (*21*)	0.30 (*22*)	0.17 (*23*)
Container material (*24*)	304 SS	304 SS	carbon steel	carbon steel	carbon steel
Reactions with U (*24*)	slow attack (*9*)	slow attack (*9*)	slow attack (*13*)	slow attack (*13*)	slow attack (*13*)
Reactions with Pu (*24*)	slow attack (*9*)	slow attack (*9*)	NA	NA	NA
Toxicity	none	none	slight (*13*)	slight (*13*)	slight (*13*)
Fire or explosion hazard	none	none	moderate (*13*)	moderate (*13*)	moderate (*13*)
Evaluation parameters					
$\mu^{0.3}/\rho^2 C_p^{2.8}$	0.000140	0.000081	0.00133	0.00132	0.00188
$\xi\Sigma_s$	1.36 (*9*)	0.18 (*9*)	0.715 (*9*)	0.644[f]	0.715[f]
$\Sigma_s\xi/\Sigma_a$	62 (*9*)	5,000 (*9*)	83 (*9*)	75[f]	83[f]

* Italic numbers in parentheses are references.
[a] 2,000 psia.
[b] Computed from data.
[c] Estimated from parachor values.
[d] Estimated from lower temperature.
[e] Estimated from water.
[f] Estimated from hydrogen value.
NA = not available.

Gases

	Hydrogen	*Helium*	*CO_2*	*Air*	*Nitrogen*	*Steam*	*Neon*
General physical properties							
Atomic number (or formula)	H_2	2	CO_2	79 % N_2, 21 % O_2	N_2	H_2O	10
Molecular wt.	2.016	4.0	44.01	29 (effective)	28.02	18.016	20.183
Density (lb/ft³)	0.00185 (*8*)	0.00375 (*24*)	0.041 (*8*)	0.0275 (*8*)	0.026 (*8*)	0.0167 (*8*)	0.0190 (*25*)
Viscosity (lb/hr/ft)	0.042 (*8*)	0.094 (*8*)	0.081 (*8*)	0.089 (*8*)	0.086 (*8*)	0.069 (*8*)	0.1445 (*26*)
Thermal properties							
Heat capacity, (Btu/lb/°F)	3.625 (*8*)	1.245 (*8*)	0.283 (*8*)	0.263 (*8*)	0.268 (*8*)	0.518 (*8*)	0.246 (*27*)
Thermal conductivity (Btu/hr/ft/°F)	0.224 (*24*)	0.159 (*24*)	0.0328 (*8*)	0.0337 (*8*)	0.0327 (*8*)	0.0341 (*8*)	0.0536 (*28*)
Prandtl number	0.660 (*8*)	0.735[a]	0.6988 (*8*)	0.6898 (*8*)	0.7097 (*8*)	1.048[a]	0.6632[a]
Nuclear properties							
	0.332 (*29*)	0.0070 (*29*)	0.0049[b]4(*9*)	See N	1.88 (*29*)	0.66[b]9(*9*)	<2.8 (*29*)
n,γ daughter, half-life	none	none	—	—	7.4s (*30*)	—	40 s (*30*)
n,γ daughter activity (Mev)	none	none	small amount	small amount	2.7, 6.13, 7.10 (*30*)	small amount	0.44, 1.65 (*30*)
ξ	1.0 (*29*)	0.4281 (*29*)					0.0967 (*29*)
General properties							
Cost ($/100 ft³)	0.85 (*31*)	1.90 (*21*)	0.25 (*21*)	—	0.30 (*31*)	—	475 (*21*)
Container material (*24*)	carbon steel	carbon steel	carbon steel	carbon steel	carbon steel	304 SS	carbon steel
Reactions with U (*43*)	reacts	none	reacts	reacts	reacts	reacts	none
Reactions with Pu (*43*)	reacts	none	reacts	reacts	reacts	reacts	none
Toxicity	none	none	none	none	none	none	none
Fire or explosion hazard	high	none	none	none	none	none	none
Evaluation parameters							
W/W_{He}	0.124	1.0	1.11	3.11	3.29	1.79	6.40
D/D_{He}	1.10	1.0	0.744	0.751	0.741	0.638	0.830
S (curie/gm)	—	—	—	—	21.76	—	44.99

[a] Computed from data.
[b] Estimated.

Liquid Metals

	Bismuth	*Gallium*	*Lead*	*Lithium (nat.)*	*Mercury*	*Potassium*	*Rubidium*	*Sodium*	*Tin*
General physical properties									
Atomic number	83	31	82	3	80	19	37	11	50
Atomic (or molecular) weight	209	69.72 (*32*)	207.21	6.94	200.61	39.100	85.48	22.997	118.70
Density (lb/ft³)	608 (*32*)	359 (*32*)	646 (*32*)	29.9 (*32*)	826 [300°F] (*8*)	44.6 (*32*)	84.4 (*24*)	51.2 (*32*)	421 (*32*)
Viscosity (lb/hr/ft)	2.664 (*32*)	1.836 (*32*)	4.212 (*32*)	1.188 (*32*)	2.664 [300°F] (*8*)	0.3816 (*32*)	0.415 (*24*)	0.5040 (*32*)	2.736 (*32*)
Surface tension (dynes/cm)	360 (*32*)	NA	429 (*32*)	NA	446 [300°F] (*32*)	NA	32[a] (*9*)	147.22 (*33*)	507 (*32*)
Electrical resistivity (μohms)	142.78 (*32*)	NA	105.04 (*32*)	NA	108.7 [300°F] (*32*)	44[a] (*9*)	60[a] (*9*)	29.9 (*9*)	55.54 (*32*)
Vapor pressure (mm Hg)	negligible	negligible	negligible	negligible	1 [260°F] (*32*)	negligible	134.4 (*24*)	negligible	negligible
Thermal properties									
Melting point (°F)	520 (*32*)	85.86 (*32*)	621 (*32*)	354 (*32*)	−37.97 (*32*)	147 (*32*)	102 (*24*)	208 (*32*)	449 (*32*)
Boiling point (°F)	2,691 (*32*)	3,601 (*32*)	3,159 (*32*)	2,403 (*32*)	675 (*32*)	1,400 (*32*)	1,270 (*24*)	1,621 (*32*)	4,118 (*32*)
Heat capacity (Btu/lb/°F)	0.0369 (*32*)	0.082 (*32*)	0.037 (*32*)	1.0 (*32*)	0.033 [300°F] (*32*)	0.180 (*8*)	0.0877 (*24*)	0.3005 (*8*)	0.0639 (*8*)
Thermal conductivity (Btu/hr/ft/°F)	8.95 (*32*)	18.0[a] (*32*)	8.854 (*32*)	18.0 (*8*)	6.7 ([300°F] (*32*)	21.15 (*8*)	13.2 (*24*)	37.7 (*8*)	19.0 (*8*)
Heat of fusion (Btu/lb)	21.6 (*32*)	34.49 (*32*)	10.60 (*32*)	284.4 (*32*)	5.04 (*32*)	26.28 (*32*)	11.0 (*32*)	48.69 (*32*)	26.1 (*32*)
Heat of vaporization (Btu/lb)	367.74 (*32*)	1,825 (*32*)	368.3 (*32*)	8,424 (*32*)	125.46 (*32*)	892.8 (*32*)	363 (*32*)	1,809 (*32*)	1,031 (*32*)
Prandtl number	0.011 (*32*)	0.0083[a]	0.017 (*32*)	0.0614 (*8*)	0.012 [300°F] (*32*)	0.0033 (*32*)	0.00276[a]	0.0040 (*32*)	0.0093 (*32*)
Change of volume on fusion (% solid vol)	−3.32 (*32*)	−3.1 (*32*)	3.6 (*32*)	1.5 (*32*)	3.6 (*32*)	2.41 (*32*)	2.5 (*32*)	2.5 (*32*)	2.6 (*32*)
Nuclear properties									
σ_a, 0.025 ev (barns)	0.032 (*29*)	2.77 (*29*)	0.170 (*29*)	71.0 (*29*)	380 (*29*)	1.97 (*29*)	0.70 (*29*)	0.505 (*29*)	0.00 (*29*)
Nonelastic scattering cross section at 2 Mev (barns)	0.53 (*34*)	NA	0.64 (*34*)	<1 (*34*)	2 (*35*)	4 (3.7 Mev) (*35*)	NA	<1	1
n,γ daughter, half-life	none	14.1 h (*30*)	none	none	48 d (*30*)	12.4 (*30*)	19 d (*30*)	15 h (*30*)	112 d (*30*)
n,γ daughter activity (Mev)	none	0.84, 0.60, 3.35 (*30*)	none	none	2.8 (*30*)	0.32, 1.51 (*21*)	1.1 (*30*)	2.755, 1.368 (*30*)	0.39 (*30*)
$\bar{\xi}$	0.0096 (*29*)	0.0287 (*29*)	0.0097 (*29*)	0.2643 (*29*)	0.0100 (*29*)	0.0507 (*29*)	0.0234 (*29*)	0.0852 (*29*)	0.0169 (*29*)
General properties									
Cost ($/lb)	2.25 (*21*)	680 (*37*)	0.12 (*21*)	11 (*21*)[c]	2.82 (*21*)	3.66 (*24*)	390 (*24*)	0.17 (*21*)	1.00 (*21*)
Container material (*32*)	Cr-Mo steel	graphite	C steel	Zr	ferrous metals	304 SS	304 SS	304 SS	quartz
Reactions with U (*36,43*)	soluble	soluble	sl. soluble	slight[d]	soluble	slight[d]	slight[d]	slight[d]	sl. soluble
Reactions with Pu (*36,43*)	soluble	soluble	sl. soluble	slight[d]	soluble	slight[d]	slight[d]	slight[d]	alloys
Toxicity (*44*)	slight	slight	high	moderate	high	high	moderate	high	none
Fire or explosion hazard (*44*)	slight	none	moderate as dust	high	none	high	high	high	slight as dust
Evaluation parameters									
$\mu^{0.2}/\rho^2 C_p^{2.8}$	0.034	0.009	0.033	0.001	0.02508	0.048	0.107	0.009	0.015
S (curie/gm)		12.88	—	—	50.74	16.34	0.52	7.11	0.06
$(T_b - T_m)/T_m$	1.49	2.41	1.74	1.40	0.94	0.86	0.80	0.97	2.51

NA = not available. [a] Computed from data. [b] Computed from Pb and Bi. [d] Due to impurities. [e] 99.99% Li^7—$54.50/lb. (*39*).

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Zinc	Na(56%) K(44%)	Na(22%) K(78%)	Pb(44.5%) Bi(55.5%) eutectic
30	—	—	—
65.38	30.082	35.557	208.2
428 (32)	48.8 (32)	46.38 (32)	625.5 (8)
6.192 (32)	0.435 (8)	0.043 (8)	2.88 (8)
780 (32)	NA	NA	NA
35.22 (32)	72 (33)	77 (33)	129.85 (32)
negligible	negligible	negligible	negligible
787 (32)	66.2 (32)	12 (32)	257 (32)
1,663 (32)	1,518 (32)	1,443 (32)	3,038 (32)
0.1165 (8)	0.2484 (8)	0.2083 (8)	0.035 (8)
33.2 (8)	16.35 (8)	15.98 (8)	8.05[a] (8)
43.92 (32)	—	—	—
755.1 (32)	—	—	—
0.022 (32)	0.0065 (32)	0.0053 (8)	0.0125[a]
6.9 (32)	2.5 (32)	2.5 (32)	0.0 (32)
1.06 (29)			0.094[b]
1	NA	NA	0.58[b]
none	see K, Na	see K, Na	none
none			none
0.0305 (29)	—	—	—
13 (21)	0.60 (38)	0.80 (38)	see Pb, Bi
graphite	304 SS	304 SS	Cr-Mo steel
sl. soluble	slight[d]	slight[d]	sl. soluble
NA	slight[d]	slight[d]	sl. soluble
none	high	high	high
moderate	high	high	moderate as dust
0.003	0.017	0.031	0.024
—	see K, Na	see K, Na	—
0.60	0.99	0.98	1.91

requirement for liquid coolants (*5*).

For gas coolants, the previous expression does not hold. This expression is based on the assumption that the total rate of heat transfer, the reactor heat-transfer area and the temperature difference through the core are independent of the physical properties of the coolant. But these values are related to the gas film-heat-transfer coefficient, which, in gas-cooled reactors, is a controlling factor in setting the heat-transfer area. If the heat-transfer coefficient is to be kept constant, the channel dimensions must vary for coolants with different physical properties. In liquid-cooled reactors the film coefficient on the coolant side is usually fairly large so that the factor controlling the heat-transfer area is usually the metal wall thickness.

A relationship that does account for the variation in coolant-channel diameter with coolant properties has been developed (*6*)

$$W \propto \mu^{1.27}/C_p^{1.73}k^{1.6}M^2$$

In this relationship the channel diameter is related to the coolant properties by the expression

$$D \propto k^{0.6}/C_p^{0.4}\mu^{0.4}$$

Values for both these expressions are listed in the table for each gas. The pumping-power factor is presented as a ratio W/W_{He} relative to helium. Also presented is a diameter ratio, D/D_{He}, relative to helium. The diameter ratio is important if two interchangeable gases are contemplated for the same system.

5. The buildup of induced activity in a coolant is of major importance because it greatly affects the amount of shielding required for the coolant systems. A measure of this activity buildup is specific activity governed by the relationship (*7*)

$$S = 0.6\phi\sigma(1 - e^{-0.67t/T})/3.7 \times 10^{10}A$$

Here σ = excitation cross section and T = half-life of the isotope formed. In calculating daughter activities for the table, the irradiation time (t) was assumed to be one fiftieth of 600 days of full-power operation because irradiation of the coolant is intermittent.

6. The expression $(T_b - T_m)T_w$ is a measure of the useful temperature range of a liquid coolant. Large values are desirable.

* * *

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(*Article continued on next page*)

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Fused Inorganic Material

	NaOH	*LiF-BeF₂(50-50)*	*NaF-BeF₂(57-43)*	*LiF-NaF-KF (46.5-11.5-42)*	*LiF-NaF-BeF₂ (35-27-38)*	*Sulfur*	*Phosphorus*
General physical properties							
Atomic number	—	—	—	—	—	16	15
Atomic (or molecular) weight	40.0	36.48	44.15	41.29	38.23	32.066	31
Density (lb/ft³)	102 (*40*)	125 (*41*)	129.3 (*41*)	133.4 (*41*)	125 (*41*)	102.5 [732°F] (*24*)	84.9 [436°F] (*24*)
Viscosity (lb/hr/ft)	1.9 [500°C] (*40*)	93.24 (*42*)	49.15 (*42*)	16.66 (*42*)	28.37 (*42*)	680 [732°F] (*24*)	<1
Surface tension (dynes/cm)	NA	NA	NA	NA	NA	42.92 [732°F] (*24*)	NA
Electrical resistivity (μohms)	NA	NA	NA	0.7042 [1,100°F] (*41*)	NA	173 [732°F] (*24*)	NA
Vapor pressure (mm Hg)	negligible	negligible	negligible	negligible	negligible	310.2 [732°F] (*24*)	227.5 [436°F] (*24*)
Thermal properties							
Melting point (°F)	605 (*40*)	662 (*42*)	680 (*42*)	849 (*42*)	640.4 (*42*)	246 (*24*)	111.5 (*24*)
Boiling point (°F)	2,534 (*40*)	—	—	—	—	832 (*24*)	536 (*24*)
Heat capacity (Btu/lb/°F)	0.507 (*40*)	0.65 [1,292°F] (*41*)	0.52 [1292°F] (*41*)	0.5 [1292°F] (*41*)	0.59 [1292°F] (*41*)	0.248 [732°F] (*24*)	NA
Thermal conductivity (Btu/hr/ft/°F)	0.80[a] (*40*)	NA	2.4[a] (*41*)	2.6 (*41*)	NA	0.0952 (*24*)	NA
Heat of fusion (Btu/lb)	68.3 (*40*)	NA	NA	171 (*41*)	NA	23.8 [15°C] (*17*)	9.06 [15°C] (*17*)
Heat of vaporization (Btu/lb)	NA	NA	NA	NA	NA	121.2 (*24*)	234 [15°C] (*17*)
Prandtl number	1.204[b]	NA	10.69[b]	3.2[b]	NA	1,771	<1
Nuclear properties							
σ_a, 0.025 ev (barns)	0.82 (*9*)	<0.03 (*29*)	<0.5 (*29*)	<2 (*29*)	<0.5 (*29*)	0.49 (*29*)	0.19 (*29*)
n,γ daughter, half-life	see Na	F — 11 s	see Na	see Na	see Na	none	none
n,γ daughter activity (Mev)		1.6				none	none
Radiation damage	low	low	low	low	low	low	low
ξ	0.77 (*9*)	NA	NA	NA	NA	0.0616 (*29*)	0.0637 (*29*)
General properties							
Cost ($/lb)	0.05 (*21*)	19[c] (*45*)	8 (*45*)	15[c] (*45*)	15[c] (*45*)	0.08 (*24*)	0.09 (*21*)
Container material	nickel (*40*)	Inor-8 (*42*)	Inor-8 (*42*)	Inor-8 (*42*)	Inor-8 (*42*)	graphite (*46*)	NA
Reactions with U (*43*)	reacts	NA	NA	NA	NA	reacts	reacts
Reactions with Pu (*43*)	reacts	NA	NA	NA	NA	reacts	reacts
Toxicity (*44*)	high	high	high	high	high	slight	moderate
Fire or explosion hazard (*44*)	none	none	none	none	none	slight	high
Evaluation parameters							
$\mu^{0.2}/\rho^2 C_p^{2.8}$	0.000732	0.000530	0.000813	0.000687	0.000548	0.0174	NA
S (curie/gm)	see Na	low	see Na	see Na	see Na	—	—
$(T_b - T_m)/T_m$	1.3	—	—	—	—	0.90	0.47

NA = not available. [a] Estimated. [b] Computed from data. [c] Based on 99.99% Li^7.

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Friction Factors for Pressure-Drop Calculations

by JAMES P. WAGGENER, *The Franklin Institute of the State of Pennsylvania, Philadelphia, Pennsylvania*

THE PRESSURE drop due to friction in a straight pipe is

$$\Delta P = f \frac{L}{D} \rho \frac{V^2}{2g}$$

Here f is the friction factor,* L/D is the length-to-diameter ratio, ρ is the density and $V^2/2g$ is the velocity head. The expression

$$\frac{1}{f^{1/2}} = 2.0 \log_{10}[Re(f)^{1/2}] - 0.8 \quad (1a)$$

or, alternatively written,

$$\frac{1}{f^{1/2}} = -2.0 \log_{10}\left[\frac{2.51}{Re(f)^{1/2}}\right] \quad (1b)$$

gives the friction factor for smooth pipes as a function of Reynolds number Re (*1*). This empirical relationship first studied by Darcy in 1858 was rediscovered by von Karman in 1930, further developed by Prandtl and finally modified by Nikuradse in 1932 on the basis of experiments (*2–4*). When plotted as a graph of f versus Re (see Fig. 1) Eq. 1 is referred to variously as the Prandtl-von Karman line, the Karman-Nikuradse line, the Moody smooth-pipe line or simply as the Moody smooth line. Since the expression contains f on both sides, solutions for f must be obtained by trial. Table 1 gives selected values (*4*).

Equation 1 can be used to extrapolate f to Reynolds numbers larger than those shown in the table.

Approximations. A comparison of isothermal flow in smooth pipes for air, oil and water (*6*) found that the average of the data fit the simpler expression

$$f = 0.0056 + 0.500\, Re^{-0.32} \quad (2)$$

to within $\pm 5\%$. The region between the corresponding upper and lower limits is indicated as the shaded portion of Fig. 1. The Moody smooth line is generally in the lower half of these tolerance limits over the entire range of Reynolds numbers from 4×10^3 to 3×10^6. Colebrook (*5*) has proposed the convenient approximation

$$\frac{1}{f^{1/2}} \cong 1.8 \log_{10} \frac{Re}{7} \quad (3)$$

which fits Eq. 1 to within $\pm 0.5\%$ for Reynolds numbers of 5×10^3–10^8.

The equation of Blasius (*7*)

$$\frac{f}{4} \cong 0.079\, Re^{-0.25} \quad (4)$$

plotted in Fig. 1 represents smooth pipe data more closely than Eq. 1 for Reynolds numbers in the range 4×10^3–10^5 —these are typical values of Reynolds numbers for fuel rod or plate assemblies.

McAdams (*8*) proposed the relation

$$\frac{f}{4} \cong 0.046\, Re^{-0.2} \quad (5)$$

which, as Fig. 1 shows, agrees with the data above a Reynolds number of 3×10^4 and is well within the tolerance range up to 2×10^6.

Rough pipes. In 1939 Colebrook extended the expression for turbulent flow in a smooth pipe to include roughness of the pipe wall in the so-called "transition" region between smooth-pipe flow and flow for which f is constant (*5*). Colebrook's general expression derived for turbulent flow in both smooth and rough pipes is

$$\frac{1}{f^{1/2}} = -2 \log_{10}\left[\frac{e}{3.7D} + \frac{2.51}{Re\, f^{1/2}}\right] \quad (6)$$

Moody, in 1944, presented the Colebrook function in the well-known Moody diagram reproduced as the background of Figs. 2 and 3.

An approximation to Eq. 6, which includes the effect of roughness, was proposed in 1947 by Moody (*9*):

$$f \cong 0.0055\left[1 + \left(20{,}000\frac{e}{D} + \frac{10^6}{Re}\right)^{1/3}\right] \quad (7)$$

Equation 7 agrees with the Moody diagram within $\pm 5\%$ for values of Re from 4×10^3 to 10^7, and for values of f up to 0.05. He recommended a tolerance of $\pm 10\%$ for the Moody-diagram friction

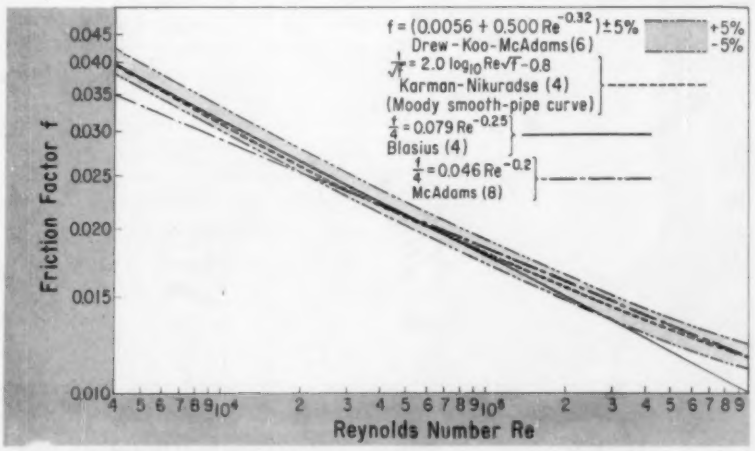

FIG. 1. FRICTION-FACTOR EXPRESSIONS compared for isothermal turbulent flow in smooth conduits. Friction factor f is plotted against Reynolds number Re

* The f defined here is the Darcy-Weisbach friction factor; it should not be confused with the Fanning friction factor f' defined by $4f' = f$.

factors other than the smooth-pipe data.

Noncircular flow area. When one calculates the Reynolds number for flow in a square, triangular or rectangular flow cross section, it is convenient to replace the diameter of the circular cross section with an equivalent diameter

$$De = 4\,\frac{\text{flow area}}{\text{wetted perimeter}}$$

Data for turbulent flow in square, triangular and rectangular cross sections have shown a close correlation (*4*) with Eq. 5 for Reynolds numbers up to 10^5. More recent data, however, for triangular channels fall about 3% under the Moody smooth line and for square channels about 10% under the Moody line between Reynolds numbers 10^4–2×10^5 (*10*).

The Colebrook function relating f to surface finish (Eq. 2) was based on experimental data derived from commercially available pipe with surfaces characteristic of manufacturing practices for round pipe. Figure 2 summarizes data for flat-plate fuel elements manufactured by a different practice and for thin rectangular flow areas (*11*). The roughness column, headed "AA," is the arithmetical average of roughness measured in several directions over the fuel plate and will vary with the fabrication process. Roughness in the direction of flow is sometimes less than in the direction transverse to flow. A Model BL110 Brush Surface Indicator with a diamond stylus was used to measure and read out roughness in microinches. Two sizes of rectangular channel were tested: 1 in. × 0.097 in. and 1 in. × 0.050 in.

Figure 2 shows that the flat-plate smooth line is coincident with the Moody smooth line. At a Reynolds number of 5×10^5 some of the flat-plate friction factors are about 20% lower than the corresponding Moody values for equal relative roughness.

Rod bundles. Figure 3 presents data for flow past bundles of rods arranged on both a triangular and a square pattern (Figs. 4a and 4b) (*10*). Here, as for the triangular flow cross section, the data for the triangular pattern of rods fall about 3% below the Moody smooth line. The data for the square pattern of rods fall as much as 10% below. In both the triangular- and the square-rod patterns the rod clearance-to-diameter ratio was 0.12. Data for the square pattern of rods with a ratio of 0.2 also fell on the 0.12-ratio curve.

Figure 3 also shows test data obtained from the Maritime Gas-Cooled Reactor for an annulus of 12 rods (Fig. 4c) with a clearance-to-diameter ratio of 0.10. The data correlate to ±5% with Eq. 5.

From de Stordeur's summary of tests conducted on 30 varieties of fuel rod assemblies (*13*), we have plotted the test data for EBR, Yankee, and three Fermi designs in Fig. 3. Details of the configurations are shown in Fig. 4. De Stordeur calculates separate drag coefficients of typical spacer designs as distinct from the frictional drag along the rods which are assumed smooth (*13*). The average correlation for the drag coefficient of grids was as much as four times greater than for spiral-wire spacers.

Friction Factor Versus Reynolds Number

Re	*f*
2×10^3	0.0494
5×10^3	0.0374
1×10^4	0.0309
2×10^4	0.0259
5×10^4	0.0209
1×10^5	0.0180
2×10^5	0.0156
5×10^5	0.0131
1×10^6	0.0116
2×10^6	0.0104
5×10^6	0.0090
1×10^7	0.0081

Heated conduits. For nonboiling heated flow of oils both Perry and McAdams include the recommendation of the Seider-Tate correlation (*14*) for decreasing the isothermal friction factor by dividing by $(\mu_B/\mu_w)^{0.14}$ (μ_B is the bulk dynamic viscosity and μ_w is the viscosity at the wall temperature). Turbulent flow data from tests on three oils flowing at up to a Reynold's number of 9,000 were correlated with the 0.14 exponent.

Tests run on water heated in rectangular channels (*11*) concluded that

$$f = (1-0.0025\,\Delta T_t)f_{iso} \qquad (8)$$

where f_{iso} is the friction factor from Fig. 2 at the measured relative rough-

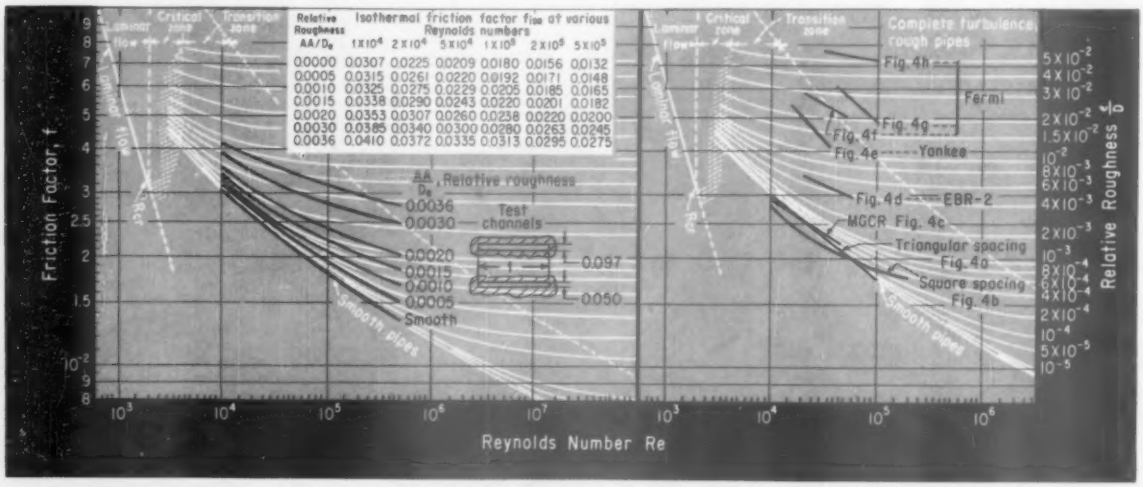

FIG. 2. FRICTION FACTORS COMPARED with Moody diagram (white) for rectangular channels (black, left) and rod bundles (black, right)

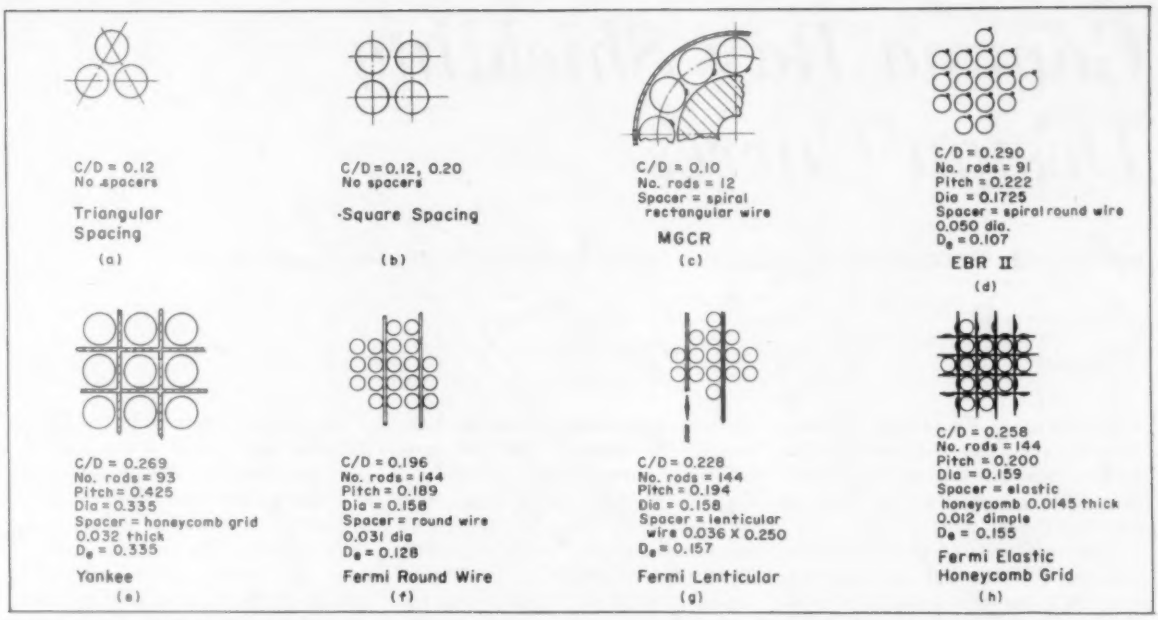

FIG. 3. FUEL-ROD CONFIGURATIONS referenced in Fig. 2. Friction factors for triangular spacing (a) fall 3% below Moody smooth line for round pipes and friction factors for square spacing fall as much as 10% below Moody smooth line

ness and a Reynolds number based on bulk-fluid properties. ΔT_f is the film drop in degrees Fahrenheit.

$$\Delta T_f = 0.776\phi/h$$

where ϕ = heat flux (Btu/hr)

and $$h = 0.023\,\frac{k_B}{De}\,(Re)_B^{0.8}(Pr)_B^{0.4}$$

Although the friction factor for the flow of gas in heated conduits has been tested rather extensively, no one expression has been generally accepted.

Humble, Lowdermilk and Desmon (*15*) report that the following equation similar to Eq. 1 correlates f:

$$\frac{1}{\left(f\,\dfrac{T_f}{T_B}\right)^{1/2}} = 2.0\log_{10}\left[Re_B\frac{\nu_B}{\nu_f}\left(f\,\frac{T_f}{T_B}\right)^{1/2}\right] - 0.8 \quad (9)$$

where $T_f = T_s + T_B/2$, f is the average friction factor and ν_B is the kinematic viscosity for the bulk fluid and ν_f for the average film temperature.

Kays and London (*16*) give in graphical form average f's as a function of conduit cross section, gas-to tube-wall temperature, and length-to-diameter ratio of the pipe for an abrupt contraction entrance.

This work is extensive and detailed and probably unique in that it presents the average f as a function of conduit length-to-diameter ratio.

Troost (*17*), in selecting correlations for HTGR calculations, chose the work of Deissler (*18*) as the most applicable for circular pipes. For both circular tubes and axial flow through rods the Deissler data give

$$f = 0.1159\,Re^{-0.2776} \quad (10)$$

Davenport and Magee (*19*), after summarizing prior work on f for gas flowing in heated tubes, conducted additional experiments on nitrogen flowing in a small tube heated up to 1,455°F. They concluded that Eq. 1a was valid for Reynolds numbers above 2×10^4 when fluid properties were evaluated at the average fluid bulk temperature. Local values of f were correlated by Eq. 1 when fluid properties were evaluated at the average of the wall and bulk temperatures.

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Gamma-Ray Shielding Design Curves

by **WILLIAM H. STEIGELMANN, Jr.,** *The Franklin Institute Laboratories, Philadelphia, Pennsylvania*

THE CURVES in Fig. 1 (for ordinary concrete) and 2 (for lead) enable an extremely rapid but accurate determination of dose rate from a point isotropic source of gamma radiation.

Determination of shield thickness required to meet a specified dose-rate criterion is the most frequently occurring problem in radiation shielding. Quite often the radiation source consists of a mixture of gamma-emitting nuclides, which is the case when shielding radioactive wastes, a reactor-coolant system, ion-exchange resins, spent-fuel processing facilities or decontamination facilities.

The shielding calculations are complicated by the fact that most radionuclides emit gamma photons with a multiplicity of energies and with a different number of photons per disintegration for each energy. Since the flux-to-dose-rate conversion factor and the attenuating properties of shielding materials are strongly energy dependent, it is necessary to calculate separately the contribution to the total dose rate of each photon energy from each nuclide and then to sum over all energies and over all nuclides present. The procedure usually involves assuming a number of shield thicknesses, calculating the dose rate for each, plotting the results and interpolating to find the shield thickness corresponding to the specified dose rate.

The point-source geometry was selected for these curves; it is frequently used in practice since any given source distribution can be approximated by an array of point sources. The nuclides shown in the figures often determine shielding requirements because they emit energetic photons, have large fission yields or appear in large quantities as the result of neutron activation of the coolant or reactor structure.

The curves appearing in the figures represent the product of the dose rate per curie of activity (D_i) and the square of source-to-dose-point distance (a) as a function of shielding thickness for each nuclide. To determine actual dose rate from a given radioactive source, it is only necessary to determine the value of the quantity $D_i a^2$ from the appropriate curve for a given shield thickness, multiply this quantity by the source activity (in curies), and divide this product by the square of the source-to-dose-point distance (in feet). All the energy-dependent factors are therefore essentially "precalculated" for the shield designer. These curves are based on the use of point-isotropic-source, infinite-medium buildup factors.

It should be noted that for very thin shields, beta and bremsstrahlung radiations, which have not been considered here, may become significant.

Sample Use of Curves

Problem: Find the dose rate 10 ft from a point source containing 2 curies of Cr^{51}, 0.3 curie of Mn^{56} and 0.05 curie each of Fe^{59} and Co^{60}. The shield is 12 in. of ordinary concrete.

Solution:

$$D = \frac{1}{a^2} \sum_i A_i [D_i a^2]$$

[A_i is the activity of the ith nuclide.]

From Fig. 1:

i	$D_i a^2$
Cr^{51}	3.6
Mn^{56}	850
Fe^{59}	620
Co^{60}	1,450

Therefore

$$D = \frac{1}{(10)^2} [(2)(3.6) + (0.3)(850) + (0.05)(620) + (0.05)(1{,}450)] = 3.7 \text{ mr/hr}$$

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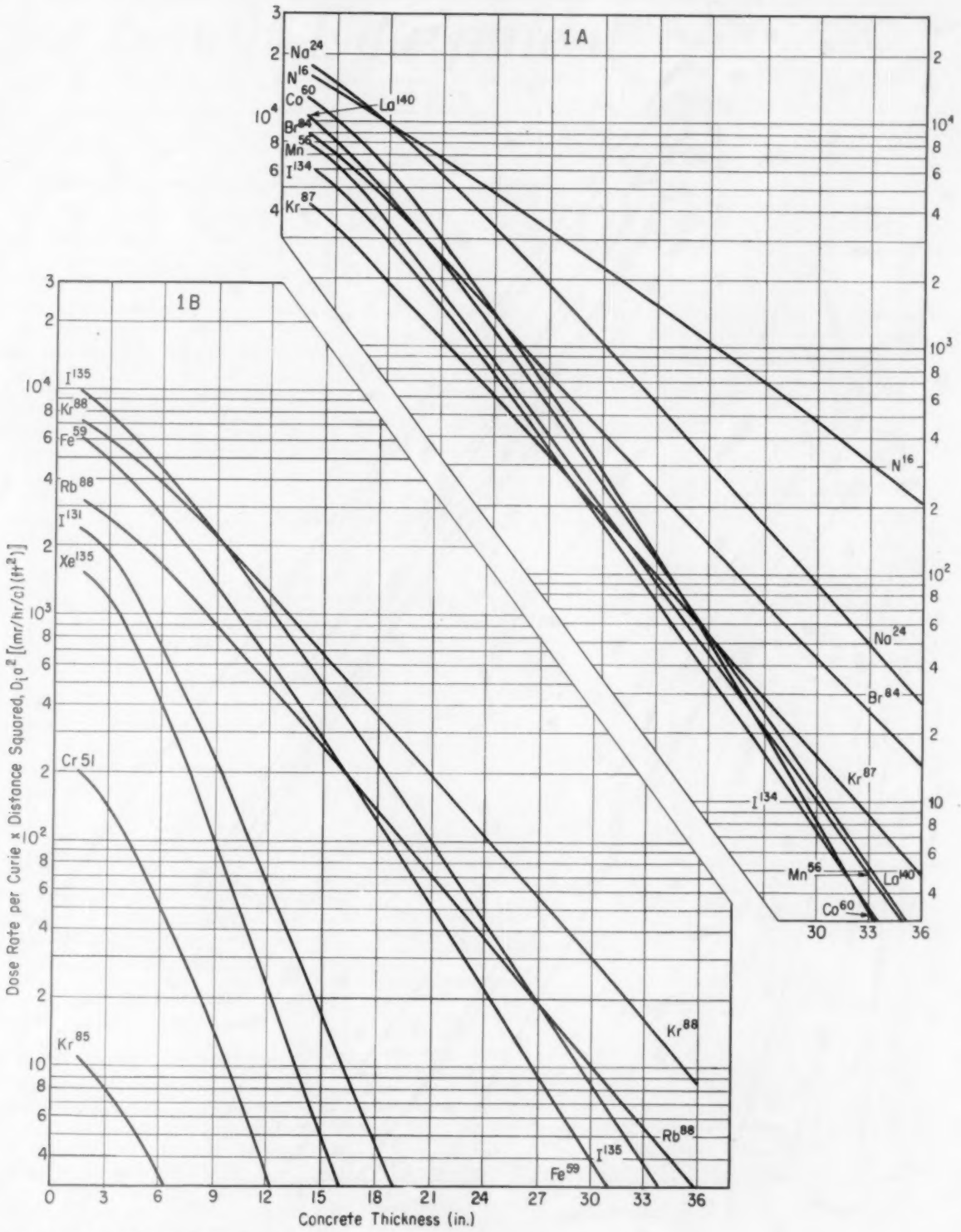
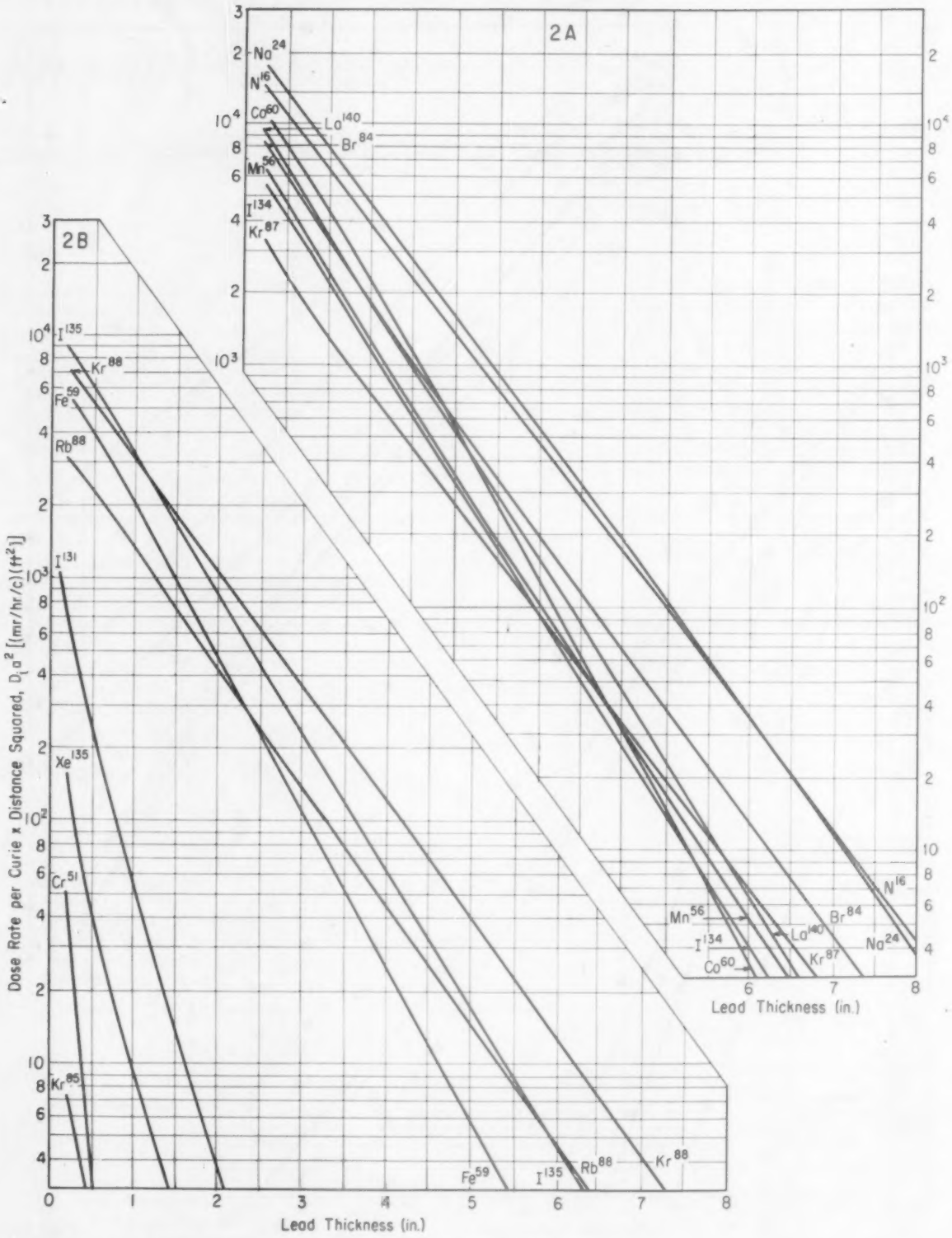


FIGS. 1A & B. CONCRETE SHIELD; curves are based on point-isotropic gamma sources



FIGS. 2A & B. LEAD SHIELD; curves are based on point-isotropic gamma sources

Decontamination Techniques for Small Equipment

by JOHN B. HUFF, *Atomic Energy Division, Phillips Petroleum Company, Idaho Falls, Idaho*

MOST SMALL EQUIPMENT items—contaminated in reactor primary-coolant circuits or fuel-reprocessing plants—can be successfully decontaminated. Decontamination is frequently less expensive than disposing of the equipment as radioactive waste, especially if the equipment can be returned to service in controlled areas. A wrench reading 8 mr/hr produces only a negligible dose to the workman using it an hour or two each week. Decontamination from an initial level of 800 mr/hr to 8 mr/hr is usually relatively simple—it would be much more difficult and costly to reach the level required to return the wrench to the manufacturer.

Small equipment is generally easier to decontaminate than larger, fixed assemblies. With small units it is possible to approach optimum temperature, rinsing, contact time, mechanical action and other variables. Decontamination of solid surfaces is, however, still very much an art. At the Idaho Chemical Processing Plant (ICPP) no fixed procedures are specified in the decontamination of small equipment. Individuals doing the work usually choose the tools and reagents, then adjust their techniques to fit the specific problem. Apparatus, reagents and techniques currently used at ICPP are listed in Tables 1–3.

Decontamination Philosophy

Equipment is contaminated by adhering solid particles or by contact with solutions. Particles can usually be removed by conventional cleaning methods. Aqueous solutions, however, leave residues that are difficult to remove; for example radioisotopes of zirconium, niobium and ruthenium form contamination films that are insoluble in nitric acid.

In decontamination it is necessary to consider the problem of cross contamination (carry-over of contamination from one point to another by cleaning solutions) and the difficulty of decontaminating to background levels in a limited volume of solution—both involve equilibrium at an solid-liquid interface. It is also clear that stagnant areas of solid-liquid interface soon reach equilibrium without adequate circulation. The following stud-

TABLE 1—Equipment Used in Decontamination

Code	*Equipment*
E-1	**Descaling gun.** Multiple-needle bit, compressed-air drive (P. Von Arx AG, Sissach, Switzerland; distributed by J. P. Reeves, Salt Lake City, Utah).
E-2	**Floor.** Sunken stainless steel. Floor is essentially drip pan 24 ft by 48 ft by 6 in. deep with hot drains containing screen traps. Welded stainless-steel ramps rising to building floor permit moving trucks or carts in and out of area; one-ton crane serves room. Since this floor is readily decontaminated by technique T-10 (Table 3), radioactive substances can be flushed or blown from equipment.
E-3	**Floor scrubber.** Electric (model HD-16 Floormaster with No. 1604 Palmetto brush, Atlas Floor Surfacing Machinery Corp., New York, N. Y.).
E-4	**Jet; high-pressure water.** Compressed-air drive; water delivered at about 5 times air pressure—or 600 psi at ICPP (No. 226-092-Hydra-Clean 500, Gray Co., Inc., Minneapolis, Minn.).
E-5	**Shoe buffer.** Custom built to drive 10-in.-diameter × 1 in. face wire scratch wheel and 10-in.-diameter × ½ in. fiber buff wheel at 1,720 rpm. Wheels are mounted on 1-hp motor shaft installed in laboratory hood; partial individual enclosures draw dust into vacuum-cleaner system.
E-6	**Sink, laboratory.** Custom built, with vented hood and glass window for complete enclosure.
E-7	**Steam-jet syphon.** Type 316 stainless steel, ½-in. size (SK Fig. 217, Schutte and Koerting Co., Cornwells Heights, Pa.). Steam is supplied through a hose; short lengths of hose can be attached to water-intake and -discharge lines when needed. For decontaminating inaccessible surfaces.
E-8	**Trough, portable.** Custom built, stainless steel, 11-in.-radius round bottom, 16-in. depth, 16-ft length.
E-9	**Vat, 3-ft dia., 6-ft depth.** Fixed cylindrical, custom built, stainless steel, steam (or cooling water) jacket, removable cover, vented.
E-10	**Vat, 30-in. dia., 30-in. depth.** Fixed cylindrical, custom built, stainless steel, steam (or cooling water) jacket, removable cover, vented.
E-11	**Vat, 2½ ft wide, 6½ ft long, 1 ft deep.** Fixed rectangular, custom built, stainless steel. Vents in panel along back draw air current over vat but leave top open for crane service. Solutions heated with E-7.
E-12	**Vat, 2-ft dia., 3-ft depth.** Mixing, fixed cylindrical, custom built, stainless steel, steam-sparge heating, electric-impeller mixing, attached transfer pump with discharge lines to fixed vats and hose connections.
E-13	**Vat, 4 ft wide, 5 ft long, 3 ft deep.** Portable rectangular, custom built, stainless steel.
E-14	**Water heater.** Steam-water mixing type, ¾-inch size, style D (Powers Regulator Co., Skokie, Ill.)

ies illustrate the mechanisms at work.

First experiment. A piece of type 347 stainless steel having a 1-cm² surface area was sealed in a glass ampoule with 1 ml of primary cooling water from the Engineering Test Reactor. The ampoule was kept in boiling water for two days. The stainless steel was removed, rinsed with distilled water, dried and counted; it had taken up 28% of the activation and fission products in the cooling water.

Solutions containing only one radionuclide were then sealed in a series of ampoules. Varying the Nb^{95} concentration in nitric acid solution showed contamination trends resembling certain adsorption relationships (*1*). The equilibrium trends can be approximated by $y = \log kx$.

Variable y is contamination on the solid surface; x is the concentration of the element in solution; and k is a constant to adjust the units so that y will be positive and the data can be conveniently plotted. This trend can be recognized in complex systems involving many species of cations; it is known to be invalid under certain conditions, especially at high concentrations of zirconium and niobium. Nevertheless, the mathematical notation has practical application in decontamination problems.

Second experiment. In a system where the surface contamination is proportional to the log of the solution contamination, decontamination apparently proceeds most rapidly if the solution concentration is reduced to zero. Accordingly a reflux condenser was fitted with a small cup to hold a contaminated stainless-steel sample so that condensed nitric acid trickled over it before returning to the boiling flask. Radionuclide-solution concentration in the cup thus approached zero. The stainless-steel sample in the cup was completely decontaminated, but a similar clean piece of stainless steel in the boiling flask showed an activity buildup.

Decontaminating solutions may include complexing agents to favor shifting equilibriums in the desired direction, but it is not certain all radiocontaminants exist as ions that could take part in complexing reactions (*2, 3*). Effective proprietary compounds presumably incorporate these agents, but no method is known for keeping all contaminants in solution.

A certain amount of cross contamination is usually observed in practical decontamination work and necessitates considerable rinsing. This results in relatively large volumes of low-level waste. For economic reasons the smallest workable vats are chosen when costly solutions are used or the waste must be evaporated for storage.

General Considerations

Wet decontamination methods are much more effective—and sometimes provide satisfactory decontamination—if scrubbing or other mechanical action is included. Nonporous surfaces normally require only scrubbing

TABLE 2—Decontamination Reagents

Code	*Equipment*
R-1	**Acid, nitric, conc.** Undiluted acid can be used hot on stainless steel and glass and cold, with caution, for short periods on certain carbon steel and aluminum surfaces. Slightly diluted acid (for example 12*M*) reacts violently with carbon steel, but reaction can usually be controlled at concentrations less than 1*M*. Nitric acid is hazardous product: Acid wastes must not be mixed with organic solvents; contact with rags or other combustibles should be avoided; Fumes are toxic. Observe safe handling procedures.
R-2	**Acid, oxalic.** Normally used at ~1*M* as second step in decontamination of stainless and carbon steels following treatment with alkaline permanganate solution. Crystalline oxalic acid can be sprinkled on wet concrete floors before scrubbing. Substance is poisonous and corrosive to stainless steel, especially if solution is hot.
R-3	**Acid, orthophosphoric.** Usually diluted to ~6*M*; can be used alternately with oxalic acid in multiple-step decontamination of iron, stainless steel and lead. Usually follows step involving strong oxidizing conditions. Causes some corrosion of stainless steel and most base metals. Observe safe handling practices.
R-4	**Alkaline rust remover.*** Inhibited alkaline-powder compound for degreasing and rust removal. Normally preferred over R-12 because it leaves less tarnish. Use according to manufacturer's recommendations.
R-5	**D-278 decontaminating compound.†** Mild, detergent powder. Relatively safe for both personnel and equipment and thus has wide application for general-purpose decontamination.
R-6	**Decon 4306-B.*** Acidic powder containing chlorides and fluorides. Used on aluminum and stainless steel according to manufacturer's recommendations. Very corrosive to stainless steel when mixed with nitric acid.
R-7	**Decon 4324.*** Mild, alkaline, detergent powder. Relatively safe for personnel and equipment, has wide application for general-purpose decontamination. Use according to manufacturer's recommendations; not recommended for aluminum, zinc or copper.
R-8	**Decon 4502.*** Contains alkali and permanganate. Used at high concentrations in multiple-step processes for decontaminating stubborn residues. Observe manufacturer's recommendations.
R-9	**Decon 4518.*** Acidic powder containing oxalic acid. Used in multiple-step processes, generally following item R-8, according to manufacturer's recommendations.
R-10	**Decon solvent.*** Organic solvent for decontaminating electrical components, rubber hoses, extension cords and related equipment. Use according to manufacturer's recommendations.
R-11	**Methylchloroform.** (Chlorothene,‡ 1,1,1-trichloroethane, inhibited.) A chlorinated hydrocarbon for use where organic safety solvent is indicated. Use adequate ventilation. May corrode aluminum under certain conditions. Follow manufacturer's recommendations.
R-12	**Sodium hydroxide.** (Caustic soda.) Boiling solutions of 1–3*M* concentration are used for removing oil, grease and paint from many surfaces. Rapidly attacks aluminum. Avoid contact with skin and eyes.
R-13	**Solvent No. 5.§** Chlorinated solvent for decontaminating electrical components, rubber hoses, extension cords and other purposes requiring organic solvent. Can be applied with sponge or bristle brush, then blown off with suitable air jet. Motors can be run in solvent according to instructions. Use adequate ventilation and otherwise follow manufacturer's recommendations.
R-14	**Tide.¶** (Household detergent.) Can be used on breathing protection equipment as it normally leaves no objectionable residue. Rinse and dry thoroughly.
R-15	**Turco-Solv.*** Organic solvent for degreasing and for use following item R-10. Follow manufacturer's recommendations.

Manufacturers:
* Turco Products, Inc., Wilmington, Calif.
† Wasatch Chemical Co., Salt Lake City, Utah.
‡ Dow Chemical Co., Midland, Mich.
§ Magnus Chemical Co., Inc., Garwood, N. J.
¶ Proctor & Gamble Co., Cincinnati, Ohio.

TABLE 3—Decontamination Techniques for Various Materials

Code	*Techniques*
T-1	**Iron and steel alloys.** Vacuum clean or flush with air or water jet. Scrub with bristle brush and hot solution of R-4, R-5, R-12 or R-14. Rinse, dry, check for contamination. Remove paint, rust and scale with E-1, E-4 or by boiling in R-4 or R-12. If residues remain, consider solutions of R-1 or multiple steps using R-8 then R-2, R-3, R-9. The appearance of carbon-steel tools is enhanced by final dip in R-4 followed by hot-water rinse and drying with cloth.
T-2	**Soft metals: aluminum, brass, copper, lead, zinc.** Clean with vacuum cleaner, water hose or solvent to start. Decontamination methods are limited by corrosion characteristics. Scrub with bristle brush and R-5 or R-14. Alkalies attack aluminum, but alkaline solutions are sometimes used for short periods. Aluminum is frequently scrubbed with R-6 or R-14. Lead is usually scrubbed with R-4 solution. Brass, copper and zinc can be treated with R-4 or R-6. Thin zinc coatings are usually damaged by decontamination. The metals in this group can be damaged by extended contact time, mixed solutions or other factors. Rinse and dry thoroughly.
T-3	**Rubber, plastic.** Rubber covered hoses and extension cords can be sponged with R-10, R-11, R-13 or R-15, then wiped dry. Detergent solutions at high pressure can be applied to large coils with E-4. Breathing protection equipment requires the mildest of reagents such as R-14. Shoe soles are decontaminated with E-5.
T-4	**Glass.** Laboratory glassware used in uranium analysis is usually boiled in nitric acid to remove uranium contamination. Other reagents can be used (*5*).
T-5	**Wood.** Hammer handles can usually be decontaminated by wire brushing with hot solution of R-4 or R-12. This removes some wood surface. On plane surfaces E-4 can be used following caustic treatment.
T-6	**Mercury.** Air is bubbled through mercury for several hours, and oxides removed by filtration. Mercury is carefully distilled under vacuum without allowing retort to boil dry. Triple distillation gives good results.
T-7	**Platinum.** Platinum ware can be boiled in R-1. Contaminated platinum that has been heated in reducing flame may not respond to any known process.
T-8	**Painted surfaces; removal of tar, grease.** Most paint films are porous. Low-level contamination can be reduced by scrubbing with R-5, R-7 or R-14. Rust under paint, broken or scaling coatings, or high-level contamination normally require paint removal; boiling solutions of R-4 or R-12 can be used alternately with E-1 or E-4 to strip paint. For tar use R-11, R-13 or R-15 followed by hot R-4 or R-12; steam hosing or E-4 can be used.
T-9	**Instruments and electrical equipment.** Includes electric saws and drills, office machines, health-physics instruments, TV cameras, motors, solenoids, meters and gages. Covers or cabinets are usually removed and decontaminated as in T-1, T-2 or T-8. Instrument is then blown out, usually with low-pressure air jet. Solvents R-10, R-11, R-13 or R-15 can then be applied with sponge or brush and excess solvent blown off. Cotton-tipped medical applicators and tobacco-pipe-stem cleaners facilitate cleaning. Careful handling is required. Most equipment should be lubricated before returning to service.
T-10	**Floors.** Floor E-2 is routinely decontaminated by hosing from E-14, then sprinkling with R-5 or R-7. Floor is scrubbed with E-3, hosed, then worked with rubber-blade squeegee toward drains. Variations of this technique have been used on carbon-steel decks and concrete floors, but operation is more difficult and results tend to be less satisfactory than on stainless steel.

with a brush and a solution chosen from Table 2.

The most difficult decontamination problems usually involve inaccessible surfaces such as spot-welded lap joints. Jets of steam, air or water can be used to flush out contamination held in cracks. The resulting floor contamination can be removed after the job is finished by technique T-10 described in Table 3.

When initial radiation fields are high or stubborn residues remain on physically clean surfaces, active chemical reagents can be employed to good advantage. Nitric acid is a good solvent for many radionuclides, but refractory residues of zirconium, niobium and ruthenium frequently contaminate the surface after this treatment. Multiple-step processes using concentrated solutions of alkaline potassium permanganate followed by preparations containing oxalic acid or certain other reagents (*4*) are recommended when simpler procedures fail. Before using the more active reagents, the materials of construction must be known so that the degree of corrosion can be estimated.

General approach. A general order of operations applies to most decontamination jobs. If possible, the preliminary work is done dry. This can include scraping off grease, removing adhesive tape, vacuum cleaning or blowing out with an air jet.

The second step, degreasing, usually includes washing with organic solvents or aqueous solutions. Decontamination is facilitated if equipment can be disassembled. Caustic solutions are preferred for degreasing where their use is permitted. Most work carries an organic film from fingerprints or other sources that must be removed. Thorough rinsing of vats and the work between steps is recommended. After degreasing, rinsing with hot water and drying with cotton cloth frequently give satisfactory decontamination.

Since the more powerful reagents are more hazardous and corrosive, their use is generally reserved for later steps. Certain problems require strong oxidants and repeated cycling through multistep processes.

Scope of the Tables

Table 3 contains techniques that require specialized tools and reagents that are not widely known. Manufacturers' names are therefore included. No attempt has been made to evaluate all available products. Items listed in the tables have proven satisfactory, but substitutions can usually be made.

The facilities outlined in Table 1 are used at ICPP to decontaminate some 500 small-equipment items each month. The designated space and apparatus could not be justified for only occasional decontamination jobs. Most of the techniques, however, can be used somewhat less efficiently in a laboratory hood or other available space.

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Codes for Reactor Computations

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As GIANT COMPUTERS play an increasingly important role in reactor computations, computer users find that their work is greatly simplified if they keep abreast of the nuclear-reactor codes being developed throughout the world. Consequently we have listed here nearly 400 of the most useful codes with the originating companies.

In our listing the reactor codes† are arranged alphabetically in eight different categories: burnup, engineering, group diffusion, kinetics, miscellaneous, Monte Carlo, physics and transport. In parentheses after each title are the originating company and the machine for which the code is written (see box for abbreviations). Then follow a few words indicating pertinent facts about the code. In some cases the number of the report that gives the details of the code is also listed. These report numbers are those used by the Office of Technical Services of the Department of Commerce.

Since the establishment in 1960 of the Reactor Mathematics and Computation Division of the American Nuclear Society, code abstracts have been published in *Nuclear Science and Engineering*, the journal of the ANS. We also expect that the Argonne National Laboratory will maintain a nuclear-code center with the cooperation of computer manufacturers.

* PRESENT ADDRESS: New Mexico State University of Agriculture, Engineering and Science, University Park, New Mexico.

† Many of these codes are abstracted at greater length in *Communication of the Association for Computing Machinery* **2**, No. 1 (1959); **3**, No. 1 (1960).

Nuclear-Reactor Code Listings

Burnup

ABRAC (WB-4) Three-dimensional depletion like DRACO. WAPD-TM-203
ACE DRIFT (DT-N) Two-dimensional, two-group burnout
BOUT AND BOUT II (USE WITH PROD II) (GK-0) Three-group burnout
BOX (GK-4) One-dimensional, few-group burnout
BRIC (WB-4) Two-dimensional depletion like TURBO. WAPD-TM-208
BUIC (MV-0) Isotopic concentrations versus flux time
BURNOUT (PART OF MAGNUM) (GM-4) Flux during core life. GMR-103
BURNUP (MV-0) Burnup of U^{235}, production of plutonium
BURNUP X (AT-4) Lifetime for thermal reactors for constant power
BURNUP XIV (AT-4) Lifetime for thermal reactors for constant power

Abbreviations Used in Code Listings

The following abbreviations are used for companies:

AE	AEEW, Winfrith, Dorchester, Dorset, England
AI	Atomics International, Box 309, Canoga Park, Calif.
AN	Argonne National Laboratory, Argonne, Ill.
AP	Alco Products, Inc., Schenectady, N. Y.
AS	Aerojet-General Nucleonics, Sacramento, Calif.
AS*	Aerojet-General Nucleonics, San Ramon, Calif.
AT	General Atomic Division of General Dynamics, Box 608, San Diego 12, Calif.
BI	Battelle Memorial Institute, Columbus, O.
BN	Brookhaven National Laboratory, Upton, N. Y.
BU	Burroughs Corp., Electrodata Div., 460 Sierra Madre Villa, Pasadena, Calif.
BX	Babcock and Wilcox, A.E.D., Lynchburg, Va.
CB	Combustion Engineering, Inc., Windsor, Conn.
CF	Convair Div., Gen. Dynamics, Fort Worth, Tex.
CS	Convair Div., Gen. Dynamics, San Diego, Calif.
CW	Curtiss-Wright, Research Division, Quehanna, Pa.
DN	E. I. du Pont de Nemours & Co., Inc., Savannah River Lab., Aiken, S. C.
DT	David Taylor Model Basin, Navy Dept., Wash., D. C.
EA	AERE, Harwell, Berkshire, England
ER	Risley, Warrington, Lancashire, England
GH	General Electric Co., Hanford, Wash.
GK	GE Knolls Atomic Power Lab., Schenectady, N. Y.
GM	Research Staff, General Motors Corp., Box 188, N. End Sta., Detroit, Mich.
GN	General Electric Co., ANP Dept., Cincinnati 15, O.
IN	Internuclear Company, 7 N. Brentwood Blvd., Clayton, Mo.
IT	Illinois Institute of Technology, Armor Research Foundation, 10 W. 35th St., Chicago, Ill.
LA	Los Alamos Scientific Lab., University of California, Los Alamos, N. M.
LC	University of California Radiation Lab., P. O. Box 808, Livermore, Calif.
MB	The Martin Co., Baltimore 3, Md.
ML	Missile Systems Div., Lockheed Aircraft Corp., Palo Alto, Calif.
MV	American-Standard, Atomic Energy Div., 369 Whisman Rd., Mountain View, Calif.
NA	North American Aviation, Inc., Los Angeles, Calif.
NF	National Advisory Committee for Aeronautics, 21000 Brook Park Rd., Cleveland, O.
NQ	Nuclear Development Corporation of America, 5 New Street, White Plains, N. Y.
NU	New York University, AEC Computing Facility, 25 Waverly Pl., New York 3, N. Y.
NV	Naval Research Laboratory, Washington, D. C.
ON	Oak Ridge National Laboratory, Oak Ridge, Tenn.
PI	Phillips Petroleum Company, AED, Idaho Falls, Ida.
RD	Rolls-Royce, Ltd., Littleover, Derby, England
RR	Raytheon Manufacturing Co., Waltham, Mass.
UM	University of Michigan, Ann Arbor, Mich.
VA	Vallecitos Atomic of G.E., Pleasanton, Calif.
WA	Wright Air Dev., Div., Wright-Patterson AFB, O.
WB	Westinghouse Atomic Power Div., Bettis Plant, Box 1468, Pittsburgh, Pa.

Machines are indicated by the following codes:

0	IBM-650	K	Besk
3	Univac 1103-1103A	L	Univac Larc
4	IBM-704	M	Ferranti Mercury
9	IBM-709-7090	N	Norc
		O	Oracle
D	Datatron 205	T	Philco Transac
G	George (Avidac)	U	Univac I-II

For example, TRANVAR (GK-4) was originated at Knolls Atomic Power Laboratory for the IBM-704.

BURP (AS*-9) Two-dimensional burnup
CANDLE 1, 2, 3 (WB-4) One-dimensional depletion using WANDA. WAPD-TM-53
COMBINED CYCLE LIFETIME (BX-D) Burnout of U^{235}-U^{238} or thorium-uranium cycle
CUREBO (GK-4) Two-dimensional depletion using CURE. KAPL-1885
DRACO (WB-4) Three-dimensional depletion using TKO
FEVER (AT-9) One-dimensional depletion with four groups
FISSION PRODUCT PROBLEM (ON-0) From U^{235} versus flux, etc. ORNL-2127
FLAME (DT-L) Three-dimensional multigroup burnout
FRP (MN-4) Core criticality versus time. MDD-1707
FUELCYC (AT-4) Two dimensional, two group for power reactors. NYO-2131
GPR (GH-9) Plutonium recycle systems. HW-54074
GROM (LC-9) One-dimensional depletion using ZOOM
HYDRA (WB-4) Fission-product activities
I-B-P (CW-4) Seven daughters for radioactive decay
INA (IN-9) One-dimensional few-group depletion. TM-GEP-60-2
KARE (GK-T) Two-dimensional depletion system
LBPP (MB-4) Iteration of C3 with burnup
MELEAGER (GH-9) Isotopic concentrations versus time
THOR (LC-0) Mocking breeding reactor. UCRL-UCID 4003
TNT (WB-T) Three-dimensional extension of TURBO
TURBO (WB-4) Two-dimensional depletion using PDQ. WAPD-TM-95
TWO MODE VARIATIONAL PROC (GK-4) Thermal cross sections and parameters

Engineering

AI STEAMER SYSTEM (AI-4) Steady-state heat transfer
ARC (GK-4) Steady-state thermal analysis. KAPL-M-S3G-RES-60
ART (WB-4) Replaces ATBAC
ART I (IT-0) Transient temperatures during power excursion. ANL-4951
ATBAC (WB-4) Thermal conditions during operations. WAPD-TM-20
BINTO (WB-4) Steady-state temperatures in one- or two-pass reactors. WAPD-S5W-NA-145
BLR (USE WITH SPY REACTOR) (GK-4) Transients of SAR-type boiler
BUBBLES 1 (MB-4) Heat transfer and fluid flow (steady)
CAT (WB-4) Coolant transients. AEC-145
CHOP (AS*-4) Steady-state temperatures for gas power cycles
COP (AS*-4) Heat-transfer and fluid-flow optimization. AGN-TM-355
DOTT (DN-0) Axial-temperature distribution. DP-359
EXSTEADY AND EXTRANS (MIT-4) Temp. coeff. and profiles
FLOSS I THRU XII (LC-U) One-dimensional heat transfer and fluid flow
FLT (GK-4) Transient flow in coolant system. DF-57-AD-30
FOUR RESTRAINT PIPE STRESS (AI-4) Thermal and mechanical stresses
F0010 (WB-4) Temperature and stresses in cylinders
F0020 (WB-4) Temperatures in channel
GAMMA HEATING (243) Heat from absorption. ORNL-CF-56-7-97
GENERALIZED HEAT TRANSFER CODE (ON-4) Transient and steady-state distributions
HCC (WB-4) Two-dimensional heat conduction
HEAT (WB-4) Steady-state one-dimensional heat transfer. WAPD-TM-155
HECTIC (AS*-4) Heat transfer for gas-cooled fuel elements
JET (FROM PROP) (WB-4) Synthesized lifetime thermal data
LOVELY-I (AP-0) Thermal analysis and flow requirements. APAE-MEMO-161
NOMACS (GK-4) Transients in primary and secondary cooling systems. DF-57-AD-30
NORC-SECHS (DT-N) Surface temperatures from power distribution. WAPD-T-606, 607, 608
ONE-DIMENSIONAL HEAT TRANSFER (CF-4) Includes conduction, convection and radiation
OPTIMIZER I (GN-4) Maximizes system performance
PREXY (GK-0) Pressurizer performance
PROP (FROM TURBO TO JET) (WB-4)
REACTOR POWER SYSTEM TRANSIENTS (AN-0) Three-loop reactor
RODS, TUBES, PLATES—HEAT TRANSFER ANALYSIS (MB-4)
SET CODES (WB-4) Pressure-vessel stresses. WAPD-TM-174
SFO (GK-4) Radioactive nuclides in fluid system
SINGLE PRESSURE CYCLE (ER-M) Efficiency of system. DEG-131(R)
SPY-REACTOR (GK-4) Temperatures in two-pass reactor
STDY-3 (WB-4) Steady-state temperatures. WAPD-TM-213
STEAM COOLED CORE Lattice constants in core. NE-"1-29"
TAC (GK-0) Steady-state thermal analysis. KAPL-M-RES-34
TEMP-2 (WB-4) One-dimensional transient thermal stress. WAPD-TM-214
TER (GK-4) Transient temperatures in one- or two-pass reactor
THERMAL-STRESS (BI-4) For fuel elements. BMI-1422
TIGER II (GK-4) Steady-state or transient temperatures for odd structures. KAPL-2044
TIRE (MB-4) Temperatures in rectangular elements
TURF (GK-4) Transient heat convection
TURF-6 (WB-4) Transient temperatures and stresses. ADD-57-8 and -58-12
WB TSG-1 (WB-4) Thermal stresses for cylinders. WAPD-TM-59 and -570

Group Diffusion

2G 2RI, 2G 2RII (RR-0) Spherical
2G-3R (RR-0) Spherical
2G-2R AXIAL-RADIAL COMBINATION. (AI-4) NAA W3-149
2-GROUP, 2-REGION (UM-0) ORNL-CF-55-9-133
3-GROUP, 3-REGION REACTOR WITH SHELLS. (CF-4) ORNL-CF-55-1-76
9-GROUP DIFFUSION (NF-0) Cylindrical 4 regions
9ZOOM (LC-9) Revised ZOOM. UCRL 5293
AIM (AI-4) Multigroup, multiregion for k_{eff}
AIM-5 (AI-9) Up to 12 groups like WANDA. NAA-SR-4694
ANGIE (LC-9) x-y or r-z multigroup with upscattering. Two dimensional
ANGIE (LC-4) Up to 18 group in (x,y) or (r,z). Two dimensional
BALL (LC-0) 2 group, 2 region spherical
BD-1 (MV-0) Used with VALPROD for boiling-water reactors
BEEHIVE AND HORNET (LC-0) 5 group, two region spherical. UCRL-4813
BUCKLING ITERATION (PART OF MAGNUM) (GM-4) GMR-104, -107
BUNNY I AND II (AT-0) 2 group, 2 region for sphere. GAMD-63
C2-SHORT (GN-4) Reactivity and slow-down density at 19 levels. XDC 55-3-18
C4 (GN-4) Multigroup cylindrical. XDC-58-10-42
C5 (GN-4) Extended C4. XDC-59-6-220
CRCENTBAR ROD I (AI-4) One-group theory. TDR-2371
CRCENTBAR ROD II (AI-4) Two-group theory
COGENT (CB-4) 30 group, slab, cylindrical, spherical. CEND MPC-18
COM-CEN-CH-I (NU-U) 2-region cylinder. BNLC-7368
CRCONTROL ROD WORTH CALCULATION (AP-0) APAE-MEMO-89
CRCONTROL ROD CALCULATION (AT-0) GAMD-410
CRITICALITY SEARCH (PART OF MAGNUM) (GM-4) GMR-102
CURE (GK-4) 3 group, (r,z), (r,θ), (x,y). Two dimensional. KAPL-1724
DMM (MV-0) Multigroup slab, spherical or cylindrical. ASAE-4
EDNA (ADJOINT TO WANDA) (WB-4)
ENSIGN (WB-0) Fixed-point version of LIL ABNER. WAPD-TM-3, -33
EQUIPOISE (ON-4) 2-group cylindrical. Two dimensional. ORNL-2967
F2 (GN-4) 2 groups and adjoints
F3 (GN-4) 3 groups. XDC-58-7-18
FAF (VA-0) Few-groups slabs, spheres, cylinders. GEAP-3048
CRFAT (GK-4) Three group
FIRE (LA-4) Multigroup for slab, cylinder or sphere. LA-2161
F-N (GN-4) Multigroup diffusion. XDC-60-3-68
GAMBIT (AS-0) Two-group matrix form. ANL-4352
GEORGE (GN-4) Combination of L_2, C_2, F_2. APEX-543

GNU II (PART OF MAGNUM) (GM-4) 32 group for slab, cylinder or sphere. GMR-101
HOBO (AN-0) Up to 20 groups with adjoints
HONEYBUN (AT-4) Revised BUNNY. GAMD-63
LIL ABNER (WB-0) Few-group slabs and cylinders. WAPD-TM-3
MAGNUM 32K (IN-4) System including GNU
MCC (BU-D) Revised DMM all geometries
MOONSHINE (LC-0) Up to 18 groups, 3 regions
MUG II (GK-U) Multigroup in (r,z) or (r,θ). Two dimensional
MULTIREGROUP (DN-0) Revised LIL ABNER. WAPD-TM-3
MULTIGROUP, MULTIREGION REACTOR CRITICALITY (BX-D) Includes inelastic scattering
NDT 2-3-1 (AS-4) Two group, three region
N-OPERA (MB-4) Links C-3 and F-3. MND-1760
OMR CELL CODE (AI-4) NAA-SR-MEMO-2067
PARACANTOR I AND II (LC-0) 2-group, 2-region cylinder
PDQ-2 (WB-4) Few group, variable mesh, (x,y), (r,z). Two dimensional WAPD-159-TM-70
PERCOLATOR (VA-0) Input to VALPROD
PPCO 10-004 (PI-0) Used with PROD II output
CRPPCO 10-006 (PI-0) Murray method for 1 ring off-axis
CRPPCO 10-007 (PI-0) Nordheim-Scalettar method
CRPPCO 10-009 (PI-0) Murray-Niesttie method
CRPPCO 10-010 (PI-0) Murray-Niesttie method
PROBE I (CW-4) 32-group spherical
PROBE II (CW-4) Revised PROBE I
PROD II (GK-0) Slab, spheres and cylinders. KAPL-1415, -1531
PSYCHE (GK-4) Hexagonal cells, multigroup. Three dimensional
QED (GK-4) Two group, rectangular. Two dimensional
RE-34 (AN-4) Slab, cylinder or sphere. ANL-5859
REM (AN-4) Version of CURE for (x,y). Two dimensional
REX (AN-U) 6 programs for up to 20 groups. ANL-5437
R-Z (NQ-D) Few group. NDA-2-71
SGR LATTICE CELL CODE (AI-4) NAA Deck W-3280
SIC (AS*-4) Few-group fast constants. AGN-TM-348
STAR (NQ-D) Multigroup with any scattering. NDA 2-47
SYNFAR (MB-9) 18-group cylinder or sphere. MND-C-2200
THREE REGION DIFFUSION (AT-0) Average fluxes and ratios
TKO (WB-4) Few group. Three dimensional
TOPSY (GK-U) Multigroup, (x,y), (r,z), (r,θ). Two dimensional
TRIPROD (WA-3A) Based on VALPROD for shielding
TRIXY (GK-4) Variable mesh spacing, few group; 3 dimensional
TUGWIT (ON-0) 2 group, spherical. ORNL-CF-57-5-14
TWOD-II (CW-4) 32 group, cylindrical. Two dimensional
TWO-GROUP MULTIREGION AXIAL WINDOW-SHADE (AP-0) APAE-MEMO-88
TWO-GROUP, TWO-REGION CODE (ON-0) ORNL-CF-55-9-133
TWO-DIMENSIONAL, TWO-GROUP (WB-U) Variable coefficients. WAPD-105
UFO (GK-4) Few group x-y-z. KAPL-1999. Three dimensional
UNCLE I, II, III, IV (DN-0) Cylindrical neutron diffusion
VALPROD (VA-0) Revised PROD II. KAPL-1451, -1531
VALPROD IB, IIB (VA-0) Allows more choices than VALPROD. GEAP-0952
VAPOR (VA-0) Speeded version of VALPROD
VARI-I (CW-4) 32-group slab, spherical, cylindrical
WANDA (WB-4) Few-group slab, spherical, cylindrical. WAPD-TM-28
WANDA-5 (WB-T) Revised WANDA. WAPD-TM-241
ZOOM (LC-4) Multigroup for slabs, spheres, cylinders. UCRL-5293

Kinetics

AIRCOMP (AI-4) Reactor equation with up to 25 delay groups
AIRCUT (AI-4) One delay group with general reactivities
AIREK (AI-4) n delay groups and m feedback equations
AIREKHT (AI-4) Coupled with r-z heat transfer
AIRKEX (AI-4) One delay group with step reactivities
ARK I (IT-0) 6 delay groups and two feedback loops
BUM (AN-0) Vector transfer function with delay groups and feedback
DANE (LC-4) Usual reactor-kinetics equations
HATCHET (AS-4) Burst characteristics of pulsed reactor
INHOUR II (AI-4) Reactivity by inhour equation
K-CODE (DN-0) Similar to ARK I
PPCO 20-002 (PI-0) Up to 15 delay groups
PPCO 20-004 (PI-0) Reactivity values from inhour equation
PSP (GK-4) Reactivity increments from CURE output
REACTOR KINETICS (AT-4) For up to 6 delay groups
REDUCE (AI-4) Few delay groups from many
RE-12 (AN-G) One group for k_{ex}
RE-110 (AN-4) Excess reactivity. ANL-5577
RE-126 (AN-4) $N + 1$ roots of inhour equation and step reactivity
RE-129 (AN-4) Kinetics with use of integral equations
RE-132 (SAME AS 650 BUM) (AN-4)
RE-135 (AN-4) Step changes in reactivity
RE-29 (AN-0) Up to 18 delay groups.
RE-31 (AN-G) One group, 6 delays for k_{ex}
RHO (MB-4) Reactivity versus stable period
SAFETY (NQ-D) Dynamics solved with heat balance
TAPER (AI-4) Nuclide concentrations in neutron flux
TRANSFER I (AI-4) Transfer function of reactor in complex plane

Miscellaneous

ANDY (DN-0) $N \leq 30$ simultaneous linear differential equations. DP-299
BENIKO (MB-4) Buckling and reflector savings from experimental fluxes. MND-E-1718-2
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BNCSD (MB-4) Prepares nuclear-data tape. MND-1684
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Neutron-Shield Materials

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SHIELDING ON A SMALLER SCALE than is required for a stationary power reactor introduces space and engineering considerations that may require other materials than the steel and concrete commonly used for thermal and biological shields. These smaller-scale uses include neutron-beam shields, liners for fissionable-material safes, top (portable) shields for small reactors and shields for mobile reactors.

The tables presented here survey the shielding potentials of some organic and inorganic materials on the basis of cost and properties. Chemical properties such as flammability and thermal stability, which have previously received little consideration (*1*, *2*), are emphasized in these tables.

Table 1 is a selection from the succeeding tables of hydrogenous materials which, in our opinion, are the most useful for small-scale shielding. Although such a selection is necessarily somewhat subjective, some materials were excluded for obvious reasons—for example, the alkali-metal hydrides because of hydrolysis, the borohydrides because of cost and lack of availability and organic materials such as asphalt and anthracene which burn easily. The materials in Table 1 are in groups corresponding to working-temperature

ranges, and each group is arranged according to increasing cost. Hydrogen-atom densities and flammability permit further elimination. Tables 2–4 allow more detailed selection.

Shield-Material Criteria

The following criteria must be considered in the selection of shielding materials:

1. High hydrogen density for elastic scattering of neutrons; elastic-scattering cross section diminishes with increasing neutron energy
2. Inclusion of elements having a large thermal-neutron-capture cross section
3. Inclusion of elements capable of inelastic scattering—important for neutron energies greater than about 0.1 Mev
4. Low cost and ready availability
5. Ease of fabrication
6. Good temperature stability
7. Good radiation stability
8. Low flammability

The stringency of the requirements depends on the conditions under which the shielding material is to be employed. For a simple application such as lining for safe drawers in fissionable-material storage, temperature and radiation stability are less important; for the top shield of a high-temperature gas-cooled reactor or for reactor discharging facilities designed for operation under load conditions, their importance is paramount. Flammability, as will be seen, is a most restricting factor—for example, paraffin wax is undesirable as a neutron-beam shield and borated graphite is unsatisfactory in some applications.

In essence an effective neutron shield must contain components that contribute effectively to each of the neutron-attenuation processes (scattering and capture). Thus although a hydrogenous compound such as water is effective in the elastic-scattering region, its small macroscopic cross section in the inelastic region means that more effective shielding per unit volume can be achieved only by including a material such as iron that has a higher macroscopic cross section.

The advantage of combining various components in a shield for a fission-neutron source is indicated in Table 5 and the illustration; the illustration shows the total cross sections of iron and hydrogen along with the neutron energy spectrum for U^{235} fission. Any attempt to calculate the relative proportions of hydrogen and iron in the shield unit must take into account a number of factors including the energy spectrum of the neutron source and the tolerance level of gamma radiation accompanying inelastic scattering by the iron nucleus.

A third component of the shield may be necessary to capture thermal neutrons effectively without emission of hard gammas. Boron and the lanthanides meet both requirements.

The distribution of effective elements within the shield can vary with application. Reactor shielding components are usually arranged heterogeneously; the heavy-element part of the shield is nearest the source because it acts as a gamma and thermal shield. If neutron shielding is the sole consideration, there appears to be no advantage in a heterogeneous arrangement.

Most of the problems in selecting shielding materials lie in the choice of

TABLE 1—Best Hydrogenous Materials*

Material	*Flammability*†	*H-atom density* ($10^{23}/cm^3$)	*Cost per unit H-atom density* [(\$/lb)/(*H-atom density*)]†
50°C			
Portland cement	Low	1.4	0.0027
Borax	Low	5.5	0.011
$B(OH)_3$	Low	4.3	0.025
Polyethylene	High	7.9	0.048
Polystyrene	High	4.8	0.079
Perspex	Moderate	5.7	0.088
Melamineformaldehyde	Moderate	4.2	0.105
Polyvinylchloride	Moderate	4.1	0.107
Ureaformaldehyde	Moderate	3.7	0.119
100°C			
Gypsum	Low	3.2	0.012
Ferric oleate	Moderate	7.6	0.061
Hydrated silica	Low	1.4	0.101
Phenolformaldehyde	Moderate	4.0	0.110
Neoprene	Moderate	4.2	0.15
150°C			
Calcium stearate	Moderate	7.0	0.046
Compressed woods	Moderate	5	0.076
200°C			
$NH_4H_2PO_4$	Low	5.6	0.024
Li stearate-palmitate mixture	Moderate	7.2	0.070
$NH_4H_2PO_2$	Low	10.9	0.119
Lithium stearate	Moderate	7.3	0.140
Lithium palmitate	Moderate	7.1	0.144
Hydrazine sulfate	Low	3.8	0.92
Silicone greases	Low	3.0	2.2
250°C			
Chrysotile	Low	2.2	0.0091
Epoxide resin	Moderate	5.1	0.20
Nylon-66	Moderate	6.6	0.21
Silicone rubbers (phenyl)	Low	3.8	0.67
Silicone oils (phenyl)	Low	3	0.85
300°C			
$(NH_4)_2SO_4$	Low	6.5	0.004
Silicone-glass laminates	Low	0.5	5.1
400°C			
$LiOH \cdot H_2O$	Low	3.6	0.21
TiH_2	Moderate	9.4	1.10
ZrH_2	Moderate	7.6	1.63
500°C			
$Ca(OH)_2$	Low	3.8	0.0020
$Fe(OH)_3$	Low	6.6	0.0099
CaH_2	High	4.85	0.05
Glass-filled silicone resins	Low	1.5	1.69

* Materials are grouped according to maximum working temperature.
† Cost based on British prices.

TABLE 2—Inorganic Compounds for Neutron Shields

Compound	Density (gm/cm^3)	Melting point (°C)	H density (10^{22} atoms) (gm^{-1})	H density (10^{22} atoms) (cm^{-3})	Cost ($/lb)* British	Cost ($/lb)* U. S.	Important properties
Hydrides							
LiH	0.78	690	7.57	5.9	13.3 (1 cwt)	9.50 (500 lb)	Reacts with moist air; burns in water; dissociation at ~30 mm Hg, 690°C
NaH	1.40	800 (decomp., 380)	2.50	3.5	6.35 (L)	0.95 (½ ton)	Ignites at 230°C in air; reacts in moist air, may ignite at lower temp.; dissociation at 160 mm Hg, 380°C
CaH_2	1.70	600 (decomp.)	2.9	4.9	2.16 (L)	2.2–3 (100 lb)	Hydrolyzed by water; decomposition pressure 20 mm Hg at 700°C
MgH_2	~1.4	280 (decomp.)	4.6	~6.4	26.6 (100 lb) ? lab price was 2.55		Reacts vigorously with water; does not ignite
HfH_2	11.48	†	0.7	7.65	—		Stable in moist air below decomposition temp.
TiH_2	3.9	†	2.4	9.3	10.2 (1 cwt)	8.1–9 (100 lb)	Stable in moist air; equilibrium decomposition pressure ~10 mm Hg at 500°C for $TiH_{1.28}$
ZrH_2	5.9	†	1.3	7.6	12.4 (1 cwt)	14–15 (100 lb)	Stable in moist air; similar stability to TiH_2
$B_{10}H_{14}$	0.94	100	6.9	6.5	High		Stable to 150°C in absence of air
BNH	1.5		2.3	3.45	High		Stable to 800°C
$NaBH_4$	1.07	decomp., 300	6.35	6.8	15.50 (100 lb)	12–14 (tons)	Slow reaction with water
$LiBH_4$	0.67	decomp., 275	11.05	7.4	190.50 (100 lb)		Rapidly hydrolyzed by water
Salt Hydrates							
$Al_2(SO_4)_3 \cdot 16H_2O$	1.69		3.05	5.15	0.022 (tons, 17% Al_2O_3)	0.043 (tons)	Loses H_2O at 86°C
$Na_2B_4O_7 \cdot 10 \cdot H_2O$ (borax)	1.73		3.16	5.46	0.058–0.064 (1 ton)	0.053 (1 ton)	Loses H_2O at 75°C
Hydroxides							
$Fe(OH)_3$	3.4–3.9		1.69	5.75–6.6	0.0065 (tons)		Loses H_2O >100°C (see text)
$Al(OH)_3$	2.42		2.32	5.6	0.16 (1 ton, "alumina white")	0.05 (1 ton)	Loses water >150°C
$B(OH)_3$ (boric acid)	1.48		2.9	4.30	0.096–0.122 (1 ton)	0.092 (tons)	Loses water <100°C
$Ca(OH)_2$	2.34		1.62	3.8	0.0075 (tons, hydrated lime)	0.0091 (carload)	Dissociation pressure ½ atm at 520°C
$Sr(OH)_2$	3.6		0.99	3.6	0.525 (5 cwt)		Dissociation pressure ½ atm at 700°C
$Ba(OH_2$	4.5		0.70	3.2	0.64 (L)		Dissociation pressure ½ atm at 900°C
$Ba(OH)_2 \cdot 8H_2O$	2.18	78	3.44	7.5	0.079 (1 ton)	0.11 (tons)	Loses water readily <80°C
$Li\ OH \cdot H_2O$	1.43	450	2.52	3.6	0.77 (1 ton)	0.63 (tons)	Stable to heat and radiation
NaOH	2.13	319	1.50	3.2	0.0442 (10 tons, 98/99%)	0.052 (76%, carload)	Stable to heat and radiation
$2\ SiO_2 \cdot H_2O$	1.57		0.87	1.37	0.141 (1 ton, hydrated silica)	0.025)carload)	Loses water at 150°C
Fatty acid salts							
Lithium stearate $[Li(C_{18}H_{35}O_2)]$	1.0	221	7.3	7.3	1.02 (L)	0.503 (1 ton, mixture)	0.49 (tons)	Burn when melted if wick available (see text)
Lithium palmitate $[Li(C_{16}H_{31}O_2)]$	1.0	224	7.1	7.1	1.02 (L)		
Aluminum tristearate	1.0	103	7.2	7.2	0.7 (L)	0.32 (1 ton, mixture)	0.40 (tons)	
Aluminum palmitate (basic)	1.1	200	6.25	6.9	0.67 (L)		
Calcium stearate	1.0	180	7.0	7.0	0.32 (1 ton)		0.40 (tons)	
Sodium oleate $[Na(C_{18}H_{33}O_2)]$	1.1	232	6.1	6.7	0.268 (1 ton)		
Ferric oleate $[Fe(C_{18}H_{33}O_2)_3]$	1.15	100	6.6	7.6	0.46 (1 ton)		
Common soap (soft)	1.1	200		~7.0	0.13 (tons)		
Miscellaneous							
Portland cement (containing 0.43% H_2 as H_2O)	5.42		0.26	1.40	0.0038 (tons)		Aging, high temp. decrease H content
Asbestos, chrysotile ($3MgO \cdot 2SiO_2 \cdot 2H_2O$)	2.50		0.87	2.17	0.02 (tons)	0.025 (tons)	See text
Gypsum ($CaSO_4 \cdot 2H_2O$)	2.32		1.40	3.25	0.038 (1 ton)		Loses 1½ H_2O at 128°C

TABLE 2—Inorganic Compounds for Neutron Shields (continued)

Compound	Density (gm/cm^3)	Melting point (°C)	H density (10^{22} atoms) (gm^{-1})	H density (10^{22} atoms) (cm^{-3})	Cost ($/lb)* British	Cost ($/lb)* U. S	Important properties
Kaolin (Al_2O_3·$2SiO_2$·$2H_2O$)	2.6 avg.		0.93	2.42	0.015–0.085 (China clay, tons)	0.01 (tons)	Loses H_2O at 200°C
NH_4Cl	1.53		4.51	6.9	0.036 (8 tons)	0.08 (tons)	Sublimes at 335°C
$(NH_4)_2SO_4$	1.77		3.64	6.44	0.026 (6 tons)	0.03–0.05 (tons)	Melts with decomposition >300°C
N_2H_4·H_2SO_4	1.37	254	2.77	3.8	3.5 (L)		
$NH_4H_2PO_4$	1.80		3.13	5.64	0.133 (1 ton)	0.10 (tons)	Decomposes at 240°C
$NH_4H_2PO_2$	2.52		4.32	10.9	1.3 (L)		Decomposes at 200°C
Unibrix I.R. (5% H_2O)	4.4		0.3	1.32			Loses H_2O on heating

* Cost notation: notations in parentheses indicate quantities of materials corresponding to prices quoted. L indicates small-quantity prices listed in laboratory-chemical catalogs. Prices where available are quoted for larger quantities of industrial-grade materials. Cwt is a "hundred weight (=112 lb).

† Evolution of hydrogen begins at about 300°C; in a closed system an equilibrium is set up between the hydrogen content of the solid and of the atmosphere above it which depends on the temperatures, e.g., 10-mm Hg pressure and $TiH_{1.35}$ at 500°C.

‡ Powdered.

§ Heavy kaolinite.

the hydrogenous compound. This survey therefore gives secondary consideration to nonhydrogenous, inelastic-scattering materials.

Liquids are not considered because of the difficulty of containment and protection against evaporation. Solids are arbitrarily divided into inorganic (Table 2) and organic (Tables 3 and 4). The given hydrogen-atom densities can be compared with those for water (6.7×10^{22} atoms/cm^3) and paraffin wax (8.0×10^{22} atoms/cm^3).

Except for some available U. S. prices that are given for comparison, all prices quoted in the tables apply in the United Kingdom. The calculated costs per unit of hydrogen-atom density are based on the U. K. prices.

Inorganic Materials

Table 2 lists inorganic, hydrogen-containing materials that are readily available—as well as some rare compounds.

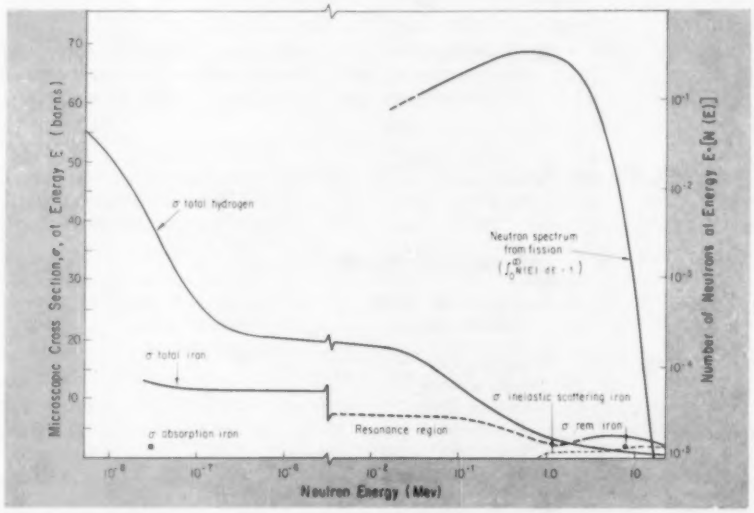
Hydrides. The hydrides have high hydrogen densities. They are, however, expensive, and most of them can be omitted because of high reactivity. The most stable of the alkali and alkaline-earth hydrides is calcium hydride with a vapor pressure of about ½ atmosphere at 1,000°C. Bare lumps of the material, however, can be ignited with a luminous gas flame.

The interstitial hydrides of hafnium, zirconium and titanium are stable to water and reportedly resist thermal decomposition up to about 400°C. To obtain maximum hydrogen content, the hydrides must be prepared from powdered metal. We have shown that powdered titanium hydride is not easily ignited in air, and therefore the hydride apparently does not retain the pyrophoricity of the powdered metal.

Greater stability to thermal decomposition can be achieved by preparing a material with less hydrogen than required by the formula XH_2, where X is Zr, Ti or Hf. Also hydrides must be contained in materials such as stainless steel or nickel alloys which are impermeable to hydrogen at 500°C. An equilibrium would then be set up between the hydrogen content of the solid and the pressure of gaseous hydrogen in the container; the value of this equilibrium depends on temperature and the particular hydride used.

The alkali borohydrides are prohibitively expensive and not readily available; the alkali and alkaline-earth hydrides are vigorously hydrolyzed by water with ignition in the case of the former. A potentially useful material is BNH, which remains as an involatile residue of $B_3N_3H_6$ decomposition. It is stable to 800–900°C, but the availability of large quantities is uncertain.

Salt hydrates. Water is an excellent moderating material, but its low boiling point renders it unattractive above ~60°C; even below 60°C complete containment against evaporation would



FISSION-NEUTRON energy spectrum and cross sections of iron and hydrogen. To meet shielding requirements, shield composition can be varied to provide appropriate hydrogen and iron content

TABLE 3—Organic Materials for Neutron Shields

Material	*Density* (gm/cm^3)	*H_2 density (10^{22} atoms)* (gm^{-1})	(cm^{-3})	*Maximum working temperature* (°C)	*Flammability*	*British price* ($/lb)	*Thermal stability*	*Radiation stability* (B_{max} = *maximum BEPO flux*) (6–8)
Cellulose								
($C_6H_{10}O_5$)	1.5*	3.72	5.58*	200	Chars in air without melting at 220°C	Cheap	Good to charring point	Poor; chain fractures easily (G = 11.7); test life in B_{max} 6 hr
Cellulose diacetate	1.32	3.43	4.54	Softens 75–100°C	Burns, but not readily	1.02	Melts 200°C with decomposition	Poor
Cellulose triacetate	1.26	3.35	4.23	Softens 75–100°C	Burns slowly	1.02	Melts 200°C with decomposition	Poor
Plastics								
Polyethylene $(CH_2)_n$	0.92†	8.58	7.9†	Softens 50–100°C	Burns readily	0.38	Melts at 110°C	Moderate; decomposition (G_{H_2} = 9.2); crosslinking (G = 6.8); test life in B_{max} 2 days
Polypropylene $(—CH{\cdot}CH_2{\cdot}CH_2)_n$	0.9	8.58	7.72	110	Burns readily	0.51	Melts at 165°C	
Polystyrene $(C_6H_5CH{\cdot}CH_2)_n$	1.06	4.63	4.80	Softens 100°C	Burns readily	0.38	Melts at 160°C	Good; test life in B_{max} 10–20 days
Polyvinylchloride $(C_2H_3Cl)_n$(Darvic) $(+C_2H_2Cl_2)_n$(Cobex)	1.4	2.9	4.1	Softens 80°C	Edge required to ignite, self-extinguishing	0.44 0.51 ("Cobex")	Chars 150°C with HCl evolution	Good; test life in B_{max} 5–10 days; thermal capture by Cl disadvantage, also HCl-formation corrosion problem
Polymethyl methacrylate $(C_5H_8O_2)_n$ (Perspex)	1.19	4.82	5.72	Softens 100°C	Edge required to ignite, flame easy to extinguish	0.38–0.63	Reversion to monomer at ~150°C, evaporates with little or no residue	Rather poor; decomposes by main chain scission etc., CO_2, H_2, CH_4 evolved; test life in B_{max} 1 day
Resins								
Urea-formaldehyde $[(C_2H_2ON_2)_n]$	1.45	2.54	3.69	75	Do not burn easily; self-extinguishing	0.25–0.63	Vapors (cyanide, phenol etc.) evolved on decomposition (200°)	Good, especially glass-laminated and asbestos-filled phenolic resins; estimated life in B_{max} up to 20 days
Melamineformaldehyde‡ $[(C_5H_7N_6)_n]$	1.50	2.79	4.18	100				
Phenolformaldehyde§ $[(C_7H_6O)_n]$	1.28	3.40	~4	100–150				
Polyamide, Nylon-66 $([NH(CH_2)_6CO]_n)$	1.14	5.8	6.52	200	Burns with small flame, readily extinguished	Up to 1.40	Melts >260° with alkaline distillate	Good, darkens and turns brittle; G for gas production = 0.7; estimated life in B_{max} 10–20 days
Fibrous polyester, "Terylene" $(C_{10}H_8O_4)$	1.4	2.5	3.5	Softens 150	Self-extinguishing	Up to 1.52	Fibers melt at ~250° forming beads and acid distillate	Fairly good but degrades by crosslinking
Crosslinked polyester			3.5	150	Self-extinguishing	Up to 0.76	Does not melt	
Epoxide resins [e.g., $C_{21}H_{24}O_4$ cured with DDM $(C_{13}H_{12}N_2)$]	1.2	4.2	5.10¶	~200	Said to burn with difficulty, self-extinguishing; our expts. do not support this; fillers improve flame resistance	1.02	Decomposition 300° without depolymerisation	Good
Polycarbonate $(C_{16}H_{14}O_3)$	1.2	3.32	3.98	150		~1.3	Melts at 270°	
Silicones								
Rubber: (phenyl type) $[—(C_6H_5)_2SiO—]$	1.15–1.3	3.04	3.5–3.95	250	Nonflammable	2.54		

TABLE 3—Organic Materials for Neutron Shields (continued)

Material	Density (gm/cm^3)	H_2 density (10^{22} atoms) (gm^{-1})	(cm^{-3})	Maximum working temperature (°C)	Flammability	British price ($/lb)	Thermal stability	Radiation stability (B_{max} = maximum BEPO flux) (6–8)
Rubber: Silastomer (non-phenyl type) [$(-CH_3)_2SiO-$]	1.2–1.27	4.86	5.83–6.17	250	Nonflammable	1.9–2.2	Greases resistant to 400°, rubbers oxidize slowly at 250°; cured resins stable to 300°	Aliph. rather poor, 1 day B_{max} becomes brittle and crumbles; phenyl good, 10 days B_{max} (see also text)
Greases (MS44)(phenyl)**	1.05	~3	~3	200	Nonflammable	6.6		
Oils (MS550)(phenyl)**	1.05–1.07	~3	~3	250	Nonflammable	2.54		
Glass-filled resins		Variable, but low		500	Nonflammable	2.54		
Glass laminates (20% resin)	2.5	Variable, but low		300	Nonflammable	2.54		
Rubbers								
Perbunan [$(C_{14}H_{21}\cdot CN)_n$] (Buna N)	0.90	5.87	5.28	100	Burns in hot flame		Decomposes 100°	Poor
Neoprene [$(C_4H_6Cl)_n$]	1.24	3.4	4.22	100–150	Nonflammable but burns sooty flame in contact with hot flame	0.63	Softens at 80°, hardens at higher temps. due to cross-linking; decomposition at 150°	Moderate
Miscellaneous								
Anthracene ($C_{14}H_{10}$)	1.25	3.4	4.23	200	Vapor ignites; solid burns	1.40	Melts at 217°, boils at 341°	Good
Asphalt [$(CH)_n$]	1.4	4.64	6.49	80	Burns readily	0.003	Begins to decompose at ~100°	
Calcium alginate [$(C_6H_7O_6)_2Ca$]	1.75	2.16	3.78	200	Does not burn	0.95	Chars and decomposes at 200°C	Poor

* Depends on packing.
† Depends on grade (see text).
‡ Unfilled.
§ Cellulose filled.
¶ Calculated from resin composition.
** Midland Silicone code number.

have to be ensured. This disadvantage is shared by the common salt hydrates. For example, borax, an otherwise ideal and cheap material, is said to lose eight molecules of water at 75°C, and silica gel, also having a high water vapor pressure, is limited to low temperatures.

Hydroxides. The ferric and aluminum hydroxides have hydrogen-atom densities approaching those of water. The ferric compound reputedly retains its water up to 500°C, but this requires confirmation.

The alkaline-earth hydroxides should be useful for high-temperature application. Caustic soda requires good containment because of its deliquescent nature. Lithium hydroxide is more expensive but has a higher hydrogen density and higher melting point. The disadvantage of the n,γ reaction that occurs with cations such as sodium and aluminum could be overcome if sufficient boron were mixed with the compounds to reduce the reaction.

Fatty acid salts. The metal stearates, palmitates and oleates are potentially attractive because of great hydrogen density, ready availability and low price. Ferric oleate combines two useful neutron attenuators, iron and hydrogen in its molecular structure.

We carried out tests on the stability of common soap in a coal-gas–oxygen flame which indicated that although ignition of decomposition vapors occurred on melting, the flame was rapidly self-extinguishing. When an asbestos wick was introduced into the melt, however, combustion was rapid and continuous—similar behavior to that of paraffin wax. Thus a substantially higher melting point is the only advantage that these compounds have over paraffin wax.

Miscellaneous. For cheap bulk reactor shielding, concrete and allied materials have found considerable use. Aging and higher temperatures reduce the initially small hydrogen content. The hydrogen content of Portland cement (0.43%) is reduced to 0.26% after 3 months at 17°C, to 0.15% after drying at 100°C and to 0.12% after heating to 200°C. Similarly, plaster brick (mainly gypsum) loses 21% of the water content in 4 hr at 210°C.

Similar remarks apply to asbestos, iron ore and other readily available hydrated minerals, although the common naturally occurring form of asbestos, chrysotile, is reported to retain a substantial proportion of its water even at elevated temperatures. Chrysotile has a water content of about 13.7%: only 29% of this is lost in 2 hr at 550°C and 13% and 2% in the same time at 390°C and 222°C, respectively.

The majority of nitrogen-hydride derivatives have low thermal stability. Table 2 includes five of the most common having great hydrogen density and stability at temperatures up to about 250°C. Ammonium hypophosphite is rich in hydrogen, and dihydrogen phosphate is used as an effective fireproofing agent for woods (see section on woods). Most ammonium compounds, however, have significant vapor pressures below their melting point.

Organic Materials

Organic materials having a high hydrogen density as a rule tend to be flammable. In many cases, flammability can only be reduced by replacing at least some hydrogen by halogen atoms, which reduces neutron-shielding effectiveness.

Table 3 includes examples of many principal types of polymer: the carbohydrate-condensation type, hydrocarbon-condensation type, hydrocarbon

TABLE 4—Laminated Woods

Product	*Brit. price ($/lb)*	*Flammability*
Permali (vacuum-impregnated cresolformaldehyde laminate)	0.38	Readily ignited, possibly easier than hardwood
Fire-proofed Permali (Permali impregnated with 9% (NH_4)-H_2PO_4 and 3% borax)	0.41	Better than Permali but burns after prolonged application of flame
Hydulignum (unimpregnated, cresolformaldehyde laminate)	0.34	Between Permali and fire-proofed Permali
Fire-proofed Hydulignum (Hydulignum impregnated with 9% $(NH_4)H_2PO_4$ and 3% borax)	0.37	Very good—self-extinguishing when flame removed
Hydrobord F (unimpregnated laminate bonded with phenol formaldehyde resin)	0.32 0.41	Similar to Hydulignum
Hydrobord T (wood and resin with boron additive)	0.65 0.83	Similar to fire-proofed Hydulignum

and vinyl-type polymers, the polyamides and polyesters, formaldehyde and polyester resins, and organo-silicon polymers (*3–5*). Some materials that can be rejected on several counts are included for the sake of completeness.

Cellulose. Cellulose has a reasonable hydrogen-atom density and is stable to 200°C. The acetate derivatives have a much lower working temperature but do not burn readily and are said to be self-extinguishing. Since one of the thermal degradation products is acetic acid, however, flammability would be serious once a large fire had started. Generally they have little to commend them as shielding materials.

Plastics. Polyethylene, polypropylene and polystyrene burn readily in air and are therefore unsuitable. Polyvinylchloride ("Darvic") is less flammable and tends to be self-extinguishing, though its working temperature is <100°C. "Cobex," in which C_2H_2Cl groups are partially replaced by $C_2H_2Cl_2$, is definitely self-extinguishing, but the hydrogen density is lower. Polyvinylchloride is expected to dehydrochlorinate readily under irradiation giving a toxic and corrosion hazard and possible catalysis of water decomposition.

Polymethylmethacrylate (Perspex or Lucite) has a temperature limitation no lower than vinylchloride polymers and a greater hydrogen density. Its radiation stability is poor, however, and it supports combustion, particularly edge burning, although several grades of the polymer are now available with greater fire resistance claimed.

Resins. The formaldehyde resins have rather low hydrogen densities and low maximum working temperatures although phenolformaldehyde does not decompose extensively below ~150°C.

In combustion tests, a filled resin, Bakelite, was self-extinguishing though it continued to burn when a flame persistently played upon an edge was removed. Most commercially available filled phenolformaldehyde resins employ flammable fillers such as paper, fabric or wood; these would not markedly alter hydrogen density. Special preparations contain glass cloth, asbestos or minerals, which decrease hydrogen density. British workers are doing research on the incorporation of phenolformaldehyde resins into glass-cloth laminates having high heat resistance and increased mechanical strength. Other possible fillers not yet commercially exploited could include some of the compounds listed in Table 2 such as aluminum or calcium hydroxide.

TABLE 5—Removal Cross Sections for Fission Neutrons (*12*)

Element	σ_{rem} *(barns)*	*Element*	σ_{rem} *(barns)*
Hydrogen	1.00*	Chlorine	1.20
Lithium	1.01	Nickel	1.89
Beryllium	1.07	Iron	1.98
Boron	0.97	Copper	2.04
Carbon	0.81	Molybdenum	2.39
Oxygen	0.99	Tungsten	2.51
Fluorine	1.29	Bismuth	3.49
Aluminum	1.31	Lead	3.53

* The hydrogen cross section at a neutron energy E of 2–20 Mev can also be calculated from the empirical expression $\sigma_{rem} = \frac{5.13}{E^{0.75}}$ (*13*).

The most common nylon, nylon-66 (polyhexamethyleneadipamide), possesses many favorable characteristics, but the cost is prohibitive. There is a possibility of using waste nylon (such as fiber trimmings) if such supplies are available. The fibrous (Terylene, polyethyleneterephthalate) and cross-linked polyesters are less attractive, since hydrogen-atom densities are little more than half that of nylon, and softening occurs at about 150°C.

Some epoxy resins are very promising. These resins are polyesters of low molecular weight which are subsequently cured and hardened by the addition of cross linking agents. The Araldite resins are among the best

TABLE 6—Calculated Macroscopic Removal Cross Sections

Material	*Temp. limit in air (°C)*	*Density (gm/cm³)*	*Brit. price ($/lb)*	Σ_{rem}* *(cm⁻¹)*
Nonhydrogenous materials				
Lead	200	11.3	0.14	0.12
Lead-B_4C (25:1)	200	10	?	0.12
PTFE $[(C_2F_4)_n]$	250	2.2	19	0.09
Steel	400	7.9	0.038	0.17
Al-B_4C (1:1)	400	2.6	5.85	0.11
Molybdenum	400	10.2	8.25	0.15
Tungsten boride (WB_2)	400	12.7	?	0.17
Unibrix P.B. (80% Fe)	400	3.4	?	0.06
Cu-B_4C (6.6:1)	500	8.0	5.08	0.18
Boron carbide (B_4C)	700	2.5	2.80	0.12
Beryllium oxide	2,000	3.0	63.5	0.15
Boron oxide	2,000	1.8	0.64	0.06
Hydrogenous materials				
Water	100	1	Negligible	0.10
Phenolformaldehyde resin	100	1.3	0.38	0.093
Ferric oleate	100	1.15	0.46	0.12
Hydulignum	150	1.3	0.37	0.10
Al palmitate	200	1.1	0.50	0.11
Chrysotile	250	2.5	0.20	0.10
$Ca(OH)_2$	500	2.3	0.0075	0.10

* Macroscopic removal cross section for fission-source neutrons.

TABLE 7—Materials for which (n,γ) Is Important*

Material (flammability)†	H-atom density ($10^{22}/cm^3$)	Cost per unit H-atom density [($/lb)/(H-atom density)]‡
50°C		
$Al_2(SO_4)_3 \cdot 16H_2O$ (L)	5.1	0.0043
$Ba(OH)_2 \cdot 8H_2O$ (L)	7.5	0.011
100°C		
Unibrix I.R. (5% H_2O) (L)	1.5	?
Al tristearate (L)	7.2	0.044
150°C		
Kaolin (L)	2.4	0.022
$Al(OH)_3$ (L)	5.6	0.029
200°C		
Common soap (M)	7.0	0.019
Sodium oleate (M)	6.7	0.040
Al palmitate (M)	6.9	0.046
300°C		
NH_4Cl (L)	6.9	0.0052
NaOH (L)	3.2	0.014
700°C		
$Sr(OH)_2$ (L)	3.6	0.15
900°C		
$Ba(OH)_2$ (L)	3.2	0.025

* Materials are grouped according to maximum working temperature.
† Degree of flammability: L = low, M = moderate, H = high.
‡ Cost based on British prices.

known. The example listed is a polyester of epichlorhydrin and bisphenol A cured with DDM (diaminodiphenylmethane). Another common curing agent, PMDA (pyromelletic dianhydride), gives a material with a lower hydrogen density.

The epoxy resins cover an enormous field, and many modifications lend themselves to improving neutron-shielding properties. For example, borax performs a dual function as a filling material—it is a neutron absorber and greatly increases fire resistance. The radiation stability of these resins is good (*6*), particularly those containing aromatic fillers such as DDM (*10*). The wide range of polyethers, curing agents and fillers available might yield an even higher working temperature than 200°C, although the expected maximum would be ~250°C. Crosslinking with urea-melamine and phenolformaldehyde resins is possible, and some British companies are developing epoxide-glass laminates having very good burning resistance, although the hydrogen density of the latter materials is very low.

Polycarbonate is a new thermoplastic resin formed by the reaction of bisphenol A with carbonyl chloride. It has properties similar to those of the epoxy resins.

Silicones. Silicone plastics and resins couple nonflammability with heat resistance and moderately good hydrogen-atom density, but their cost is high. As with the epoxy resins, the presence of aromatic groups generally increases radiation stability. Also there is evidence that radiation-induced crosslinking of silicone elastomers increases thermal stability (*9*). The glass-laminated and glass-filled resins have the highest thermal resistance but their hydrogen densities are low.

Rubbers. Buna N and neoprene are exceptions to the generally highly flammable rubbers. Both soften and lose strength at 80°C, although a combination of Buna N and asbestos is thermally stable up to 400°C.

Miscellaneous. Asphalt and anthracene are included in Table 3 as examples of the higher hydrocarbons. They are both dangerously flammable and have no advantage over paraffin wax other than a higher maximum working temperature.

Calcium alginate is manufactured as a fibrous material. The hydrogen density, initially low, may further decrease by losing water below the maximum working temperature.

Woods and wood laminates. Natural woods vary considerably in their fire resistance, but no reports of standard combustion tests have been found. Teak has a low flammability but is expensive. A less costly wood, Iroko, is highly fire resistant (*11*); it chars at the rate of ~1 in./hr in a good fire and is self-extinguishing when the heat source is removed. The density is 0.64 gm/cm³, and the hydrogen-atom density [assuming a formula $(CH_2O)_n$] is $\sim 2.6 \times 10^{22}$ atoms/cm³. Compressed woods offer higher hydrogen densities.

Compressed-wood laminates (Table 4) may consist of hardwood veneers, 0.7–2 mm thick bonded with a resin such as cresolformaldehyde. They may or may not be impregnated with various materials. The density of the laminates is about 1.3; so the hydrogen-atom density is probably $> 5 \times 10^{22}$ atoms/cm³. It is relatively easy to impregnate the laminates with boron or rare earths. Flammability was tested on 1-in.-thick samples in a coal-gas–oxygen flame (see Table 4).

Nonhydrogeneous Materials

Elements other than hydrogen may be desirable neutron-shield components if neutrons of energy greater than 0.5 Mev (for example from a fission source) are an important consideration. The same elements will also attenuate neutrons of lower energy by elastic scattering but with less efficiency than hydrogen. For example the number of collisions necessary to reduce a neutron from 2 Mev to 0.025 ev is about 490 for iron compared with 18 for hydrogen. If space and weight are not important, then a thick shield containing heavy metal atoms and little hydrogen is satisfactory over a wide range of neutron energies. In fact about half the removal cross section of heavy materials is due to elastic scattering.

In the presence of a predominantly hydrogenous shield, an effective cross section for the removal of fast neutrons from a fission source can be assigned to other elements. This empirical quantity has been measured by Chapman and Storrs (*12*). They define the removal cross section as the equivalent absorption cross section of a material located near a fissioning source that is measured by a detector separated from the source by a large thickness of water. It should be understood that "removal" in this sense means reduction of energy to the energy range in which rapid thermalization by elastic collisions with hydrogen nuclei can take place. The removal cross sections in Table 5 were used to calculate the macroscopic cross sections in Table 6.

Table 6 includes cross sections for some useful hydrogenous materials. The macroscopic removal cross section shows only a small variation from one material to another; the choice is governed largely by cost and maximum working temperature. Thus steel is the most effective cheap material available. Materials containing boron, which are almost equally effective and have the advantage of effecting thermal-neutron capture, cost much more.

It must be stressed that Tables 5 and 6 apply only to a fission-source spectrum. For neutrons of very high energy, the removal cross sections of hydrogenous materials would be expected to fall rapidly compared with those for heavy elements (see illustration). The use of removal-cross-section data in homogeneous and hetero-

geneous shields has been discussed in several publications (*1, 2, 14*).

Conclusions

For the use of materials listed in Table 1, boron could be employed in a separate shield outside the hydrogenous section. Table 7 lists other materials for which the n,γ reaction is important; boron might have to be incorporated.

In the low-temperature range, Portland cement is an outstandingly cheap material, but it has the disadvantage of a low hydrogen density—the lowest of any material considered. Laminated compressed woods are not prohibitively expensive, and their ease of fabrication makes them very attractive for use up to ~150°C; how far this temperature range could be extended is worth investigation. Of the organic materials listed, only the epoxy and silicone resins offer some promise for high-temperature use, although the silicone compounds are expensive and would probably be confined to special uses.

Some inorganic materials apparently not considered previously are worthy of attention. The alkaline-earth hydroxides are promising for high-temperature application; fabrication and containment should be investigated. The temperatures at which the dissociation pressure reaches one atmosphere are reported as $Ca(OH)_2$, 520°C; $Sr(OH)_2$, 720°C; $Ba(OH)_2$, 940°C (*15*). These values as well as the temperature stability of some of the ammonium compounds should be reinvestigated. For instance minimum decomposition temperatures quoted for ammonium sulfate vary between 300 and 500°C. Ammonium chloride has a dissociation pressure of ½ atmosphere at 300°C, and suitable containment would be needed to resist HCl corrosion.

Possible Future Work

At the moment, much of the information available is qualitative. Useful work could be carried out along the following lines:

1. Standard fire-resistance tests, especially on selected plastics, resins and compressed woods. Much of the flammability evaluation given here is based either on qualitative information from the literature or crude tests.

2. The thermal and radiation stability of hydrogen-containing inorganic materials such as the hydroxides of barium, strontium, iron and aluminum, chrysotile, gypsum, ammonium salts and the metal soaps.

3. Much physico-chemical information about the hydrides of interest (for example, the hydrides of titanium, zirconium and calcium) is available, but properties such as thermal and radiation stability, flammability and modes of fabrication require investigation.

4. Useful lines of development might be borating and fireproofing of resins (the effect of fillers on flammability is not clear), incorporation of high-hydrogen-density inorganic materials (for example, the hydrides) in resins and development of high-hydrogen-density of glass laminates. Waste products of polymer industries (e.g., nylon trimmings) might be available at a low price.

* * *

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TABLE 8—Descriptions of Special Products

Material	*Composition*	*Remarks*	*British manufacturer*
Plaster brick	Mainly $CaSO_4 \cdot 2H_2O$ (+ boric acid)	Gaged with boric acid	British Plaster Board (Holdings)
Darvic (polyvinyl-chloride)	$(C_2H_3Cl)_n$		Imperial Chemical Industries Ltd.
Silicones			I.C.I.
Phenolformaldehyde glass-cloth laminate			I.C.I.
Permali	Impregnated wood laminate	Can be fire-proofed by $NH_4H_2PO_4$ addn; boron can be incorporated	Permali Ltd.
Hydulignum	Bonded wood laminate		Permali Ltd.
Araldite	Epoxide resin	Can be loaded with B compounds or heavy metals	CIBA Ltd.
Bakelite	Filled phenolformaldehyde resin		Bakelite Ltd.
Cobex	Polyvinyl chloride + $C_2H_2Cl_2$	Rigid vinyl sheet (clear or opaque)	BX Plastic Ldt.
Urea-formaldehyde, melamine-formaldehyde, unsat. polyesters			BIP Chemicals
Titanium hydride	TiH_2		New Metals & Chemicals Ltd.
Hydrobord F	30 wood: 2 phenolformaldehyde: 1 cellulose	Similar to hydulignum, boron compounds can be incorporated	Wm. Mallinson & Son
Hydrobord T	Wood and resin		
Silicone rubbers, greases, oils, resins and glass-filled resins	$—(C_6H_5)_2SiO—$ $—(CH_3)_2SiO—$ etc.		Midland Silicones Ltd.
Boron carbide and Pb and Cu containing B_4C	Lead-B_4C (4%), Cu-B_4C (15%), B_4C powder and granular		Firth Brown Tools Ltd.
Unibrix P.B.	Concrete-barytes	85% barytes ($BaSO_4$)	Unibrix Radiation
Unibrix I.R.	Concrete-steel sheet	80% steel (5% H_2O)	Unibrix Radiation

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Reactor-Calculation Shortcuts

1. Maximum Temperature in Nuclear Fuel

by CHI S. KUO, *United Nuclear Corp., White Plains, New York*

THE FIGURE together with the equations given below provide a quick means of estimating the maximum temperature in fissioning fuel shaped in either a slab or a solid rod at steady state, if the following quantities are known: temperature at the noninsulated surface, surface heat flux, diffusion length, thermal conductivity of the fuel element and, for slab geometry, the ratio of neutron currents entering the two surfaces. The method assumes that the variation in fission-power density follows that predicted by diffusion theory.

For slabs: $m = J_0/J_s$ (1)

$$\frac{\Delta t}{\Delta t_0} = \frac{1}{1+m}\left[2m + (1-m)\left(\frac{\Delta t}{\Delta t_0}\right)_0\right] \quad (2)$$

For slabs and rods:

$$\Delta t_0 = \frac{aq}{2k} \quad (3)$$

where

t_s = temperature at rod surface, or noninsulated slab surface (see figure below)

t_0 = temperature at rod center, or insulated slab surface

$\Delta t = t_0 - t_s$

Δt_0 = Δt when computed on basis of uniform heat generation

a = slab thickness or rod radius

L = diffusion length for thermal neutrons

k = fuel thermal conductivity

q = rate of heat transfer per unit surface area

J_s = neutron current entering noninsulated slab surface

J_0 = neutron current entering insulated slab surface

$m = J_0/J_s$

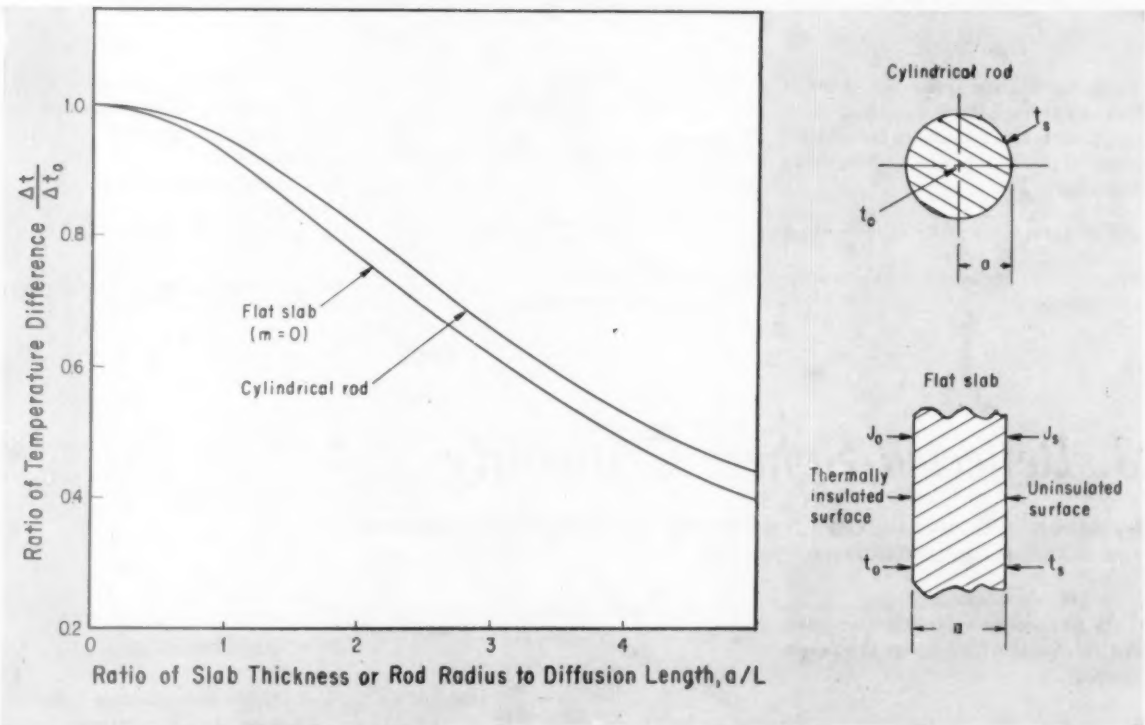
$(\Delta t/\Delta t_0)_0 = \Delta t/\Delta t_0$ for $m = 0$

To calculate t_0 for slabs

- obtain m from Eq. 1
- obtain $(\Delta t/\Delta t_0)_0$ from curve
- obtain $\Delta t/\Delta t_0$ from Eq. 2
- obtain Δt_0 from Eq. 3
- solve for Δt

To calculate t_0 for rods

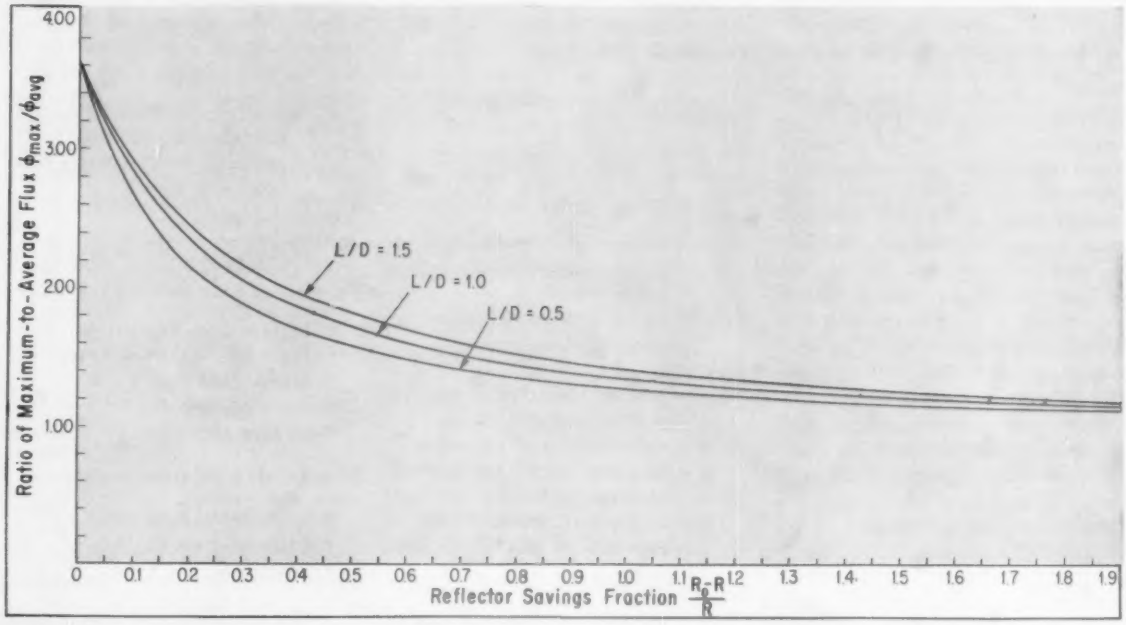
- obtain $\Delta t/\Delta t_0$ from curve
- obtain Δt_0 from Eq. 3
- solve for Δt.



TEMPERATURE-DROP RATIO in fuel as a function of ratio of element dimension to neutron diffusion length

2. *Maximum-to-Average Flux Ratio for a Cylinder*

by SHERWOOD B. MENKES, *United Nuclear Corp., White Plains, New York*



MAXIMUM-TO-AVERAGE FLUX as a function of reflector savings for cylindrical cores of various length-to-diameter ratios

THE GRAPH gives the ratio of maximum-to-average flux ϕ_{max}/ϕ_{avg} as a function of reflector savings for cylinder cores of various ratios of length to diameter L/D.

The curves are plots of $\frac{\phi_{max}}{\phi_{avg}} = \alpha\beta$

where α is the *radial* maximum-to-average ratio

$$\alpha = \frac{2.405R/R_0}{2J_1(2.405R/R_0)}$$

and β is the *axial* maximum-to-average ratio

$$\beta = \frac{\pi L}{2L_0} \times \frac{1}{(\sin \pi L)/2L_0}$$

In these expressions:

R = actual core radius

R_0 = R + reflector savings = critical radius without reflector

L = actual core length

$L_0 = L + 2(R_0 - R)$

J_1 = Bessel function, first kind, order 1

D = actual core diameter

* * *

This calculation aid was first suggested by R. Stein (United Nuclear Corp.)

3. *Reflected-Sphere Criticality*

by ARTHUR J. GOLDMAN, GERALD GOERTZEL,* and SHERWOOD B. MENKES
United Nuclear Corp., White Plains, New York

THIS NOMOGRAM solves the one-group critical equation for a spherical reflected reactor

$$\cot BR = \frac{1}{BR}(1 - D_r/D_c) - \frac{D_r\varkappa}{BD_c}\coth(\varkappa t)\dagger$$

Here

B^2 = materials buckling = $k - 1/L^2$ (cm^{-2})

k = infinite multiplication factor = $\nu\sigma_f/\sigma_a$ for fast reactors

L = core diffusion length (cm)

* PRESENT ADDRESS: Sage Instruments, Inc., White Plains, New York

D = number of neutrons produced per fission

σ_f = microscopic core fission cross section (barns)

σ_a = microscopic core absorption cross section (barns)

R = critical radius of reflected reactor (cm)

D_c = diffusion coefficient for core material (cm)

D_r = diffusion coefficient for reflector material (cm)

† There is an error in the version of this equation printed in S. Glasstone and M. C. Edlund, "The Elements of Nuclear Reactor Theory," (D. Van Nostrand Co., New York, 1952)

$\varkappa$ = inverse diffusion length of reflector materials (cm^{-1})

t = reflector thickness (cm)

The above equation was derived from one-group diffusion theory for the boundary conditions that neutron flux and current are continuous across the reflector-core interface. One must select appropriate monoenergetic cross sections and constants.

Sample problem. Find the critical radius of a reflected reactor with the following parameters

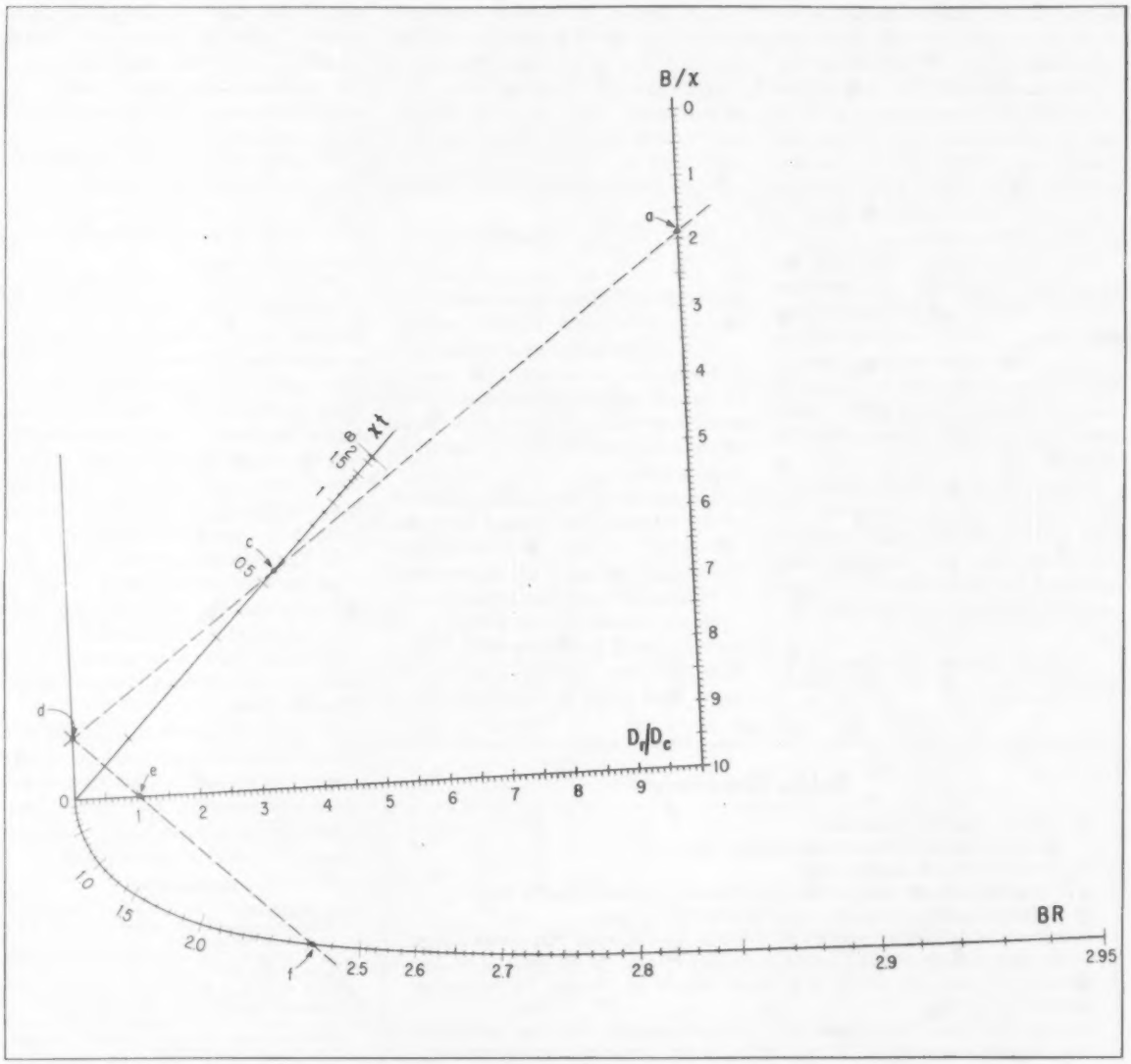
$$B = 0.0348 \text{ cm}^{-1}$$
$$\varkappa = 0.0185 \text{ cm}^{-1}$$
$$t = 30 \text{ cm}$$
$$D_r/D_c = 1.06$$

Pass straight line through Points $a(B/\varkappa = 1.88)$ and $c(\varkappa t = 0.555)$ intersecting the left-hand vertical axis at d. A second line connecting Point d and $e(D_r/D_c = 1.06)$ intersects the BR axis at $f(BR = 2.41)$. The critical radius of the reflected reactor = BR/B = 69.3 cm.

The function

$$f = 10(2)^{1/2}/[(\coth \varkappa t) + 1]$$

is plotted on the $\varkappa t$ axis in units identical to those on the D_r/D_c axis. The BR axis is plotted so that $x = 1 - BR \cot BR$ and $y = -BR$.



NOMOGRAM solves one-group critical equation (see text) for reflected homogeneous sphere

Sensitivities for Activation Analysis with 14-Mev Neutrons

by A. S. GILLESPIE, Jr.* and W. W. HILL
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THE FOLLOWING TABLE lists 14-Mev-neutron activation-analysis sensitivities that we have calculated for all elements for which cross-section data were available. These sensitivities are of particular interest with the recent appearance of several commercial fast-neutron sources and the concomitant possibilities for measurement of short-half-life activities. The source machines can usually produce 14-Mev neutrons by the $H^2(d,n)He^4$ reaction and in some cases 3.2-Mev neutrons by the $H^2(d,n)He^3$ reactions.

The calculations of this table are based on existing data in the literature. Isotopic abundances are well known. Half-lives (*1*) are known fairly well for most isotopes. Fast-neutron cross sections (*2–4*) are less reliable and in some cases are no better than ±50%. Radiation data are from Strominger and his colleagues (*5*).

Neutron flux and counting geometries are dependent on the particular neutron source and the counting system. The neutron flux and sensitivity based on initial disintegration rate are arbitrarily chosen but are considered practical for available accelerators and counting systems.

Bases of Calculations

1. A flux of 10^9 14-Mev neutrons/cm²/sec is assumed to pass through the sample. This is probably the upper limit for samples placed against targets producing 5×10^{10} n/sec total. Yields and sensitivities for machines with lower flux are correspondingly lower.

2. Radiochemical yields are given by

$$R = \frac{10^9 A\sigma F}{W}\left(1 - e^{-0.693t/T_{1/2}}\right)$$

where R = disintegrations/sec/gm of the whole element in the sample; A = Avogadro's number = 6.02×10^{23}; σ = cross section in cm²; F = fraction of target isotope in element; W = atomic weight; t = irradiation time; $T_{1/2}$ = half-life of radiation product in same units as t.

3. Irradiation time is four half-lives of the radioactive product or 1 hr, whichever is less. For irradiation times approaching 1 hr, degeneration of the target must be considered.

It is customary to monitor the beam throughout an irradiation with a separate detector. Although an irradiation time equal to four half-lives is assumed to give saturation, actually it gives 96% of saturation.

4. Sensitivity is arbitrarily defined as that amount of material (in micrograms) that yields a total of 100 dpm initially, without regard to decay schemes. In practice, especially where one particular gamma-ray energy is counted, the decay scheme would have to be considered.

Whereas 100 dpm is a reasonable figure for longer-lived materials (~10 min or more), it is not adequate for short-lived isotope work unless in-beam counting is possible.

While in-beam counting (irradiating in a pulsed neutron beam and counting between pulses) is suggested by several neutron-source manufacturers, the practicality of such a technique is somewhat questionable. Problems of detector irradiation and radioactivity buildup would likely be serious. Conversely, pneumatic transfers of samples from irradiator to detector requiring 1 sec or less are quite practical.

5. The calculations are based on cross sections for 14-Mev neutrons. No distinction is made between neutrons of 14, 14.2, 14.3, or 14.5 Mev.

6. Calculations were not made for nuclear reactions that produce mixed isomeric yields.

7. Some additional activations not shown in this table are possible. Fast-neutron cross sections for these reactions are generally not known, but relative measurements based on known standards would be quite practical.

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Table Notation

Z Atomic number of element
Fast-neutron (14 Mev) cross sections in barns
$T_{1/2}$ Half-life of activation product
t Irradiation time (four product half-lives or 1 hr, whichever is less)
R Product activity; dps/gm of total element in sample

Sensitivity is defined as quantity of material (micrograms) that yields a total of 100 dpm initially, without regard to decay scheme. Sensitivity can be converted into parts per million in a 10-gm sample by dividing the microgram sensitivity by 10.

Sensitivities marked with asterisks (*) indicate product half-lives less than 1 min, probably requiring in-beam counting or fast pneumatic sample transfer.

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Z	Reaction	σ (barns)	$T_{1/2}$	t	R	Sensitivity (μg)	Gamma radiation	Other radiation
5	$B^{11}(n,\alpha)Li^{8}$	.034	0.83 s	5 s	1.3×10^{6}	1.24*	None	β^-13(90%), 6(5%), 3(5%), 2α
7	$N^{14}(n,2n)N^{13}$	.005 ± .001	10.0 m	45 m	2.14×10^{5}	7.9	None	β^+1.19
8	$O^{16}(n,p)N^{16}$	.09	7.3 s	1 m	3.4×10^{6}	1.5*	6.13, 7.13	β^-10.4(28%), 4.39(54%), 3.32(18%)
9	$F^{19}(n,p)O^{19}$	.135 ± .050	29.4 s	2 m	4.3×10^{6}	.4*	.2, 1.366	β^-4.5(30%), 2.9(70%)
	$F^{19}(n,2n)F^{18}$	.061 ± .015	112 m	1 h	5.8×10^{5}	2.9	None	β^+.649(100%)
11	$Na^{23}(n,p)Ne^{23}$	.034 ± .015	40.2 s	4 m	9×10^{5}	2*	1.65(1%), .44(32%)	β^-2.4(1%), 3.95(32%), 4.39(67%)
	$Na^{23}(n,\gamma)Na^{24}$	.00033 ± .00003	15 h	1 h	387	4,300	1.37(100%), 2.75(100%)	β^-1.394(100%)
12	$Mg^{24}(n,p)Na^{24}$	.19 ± .03	15 h	1 h	1.55×10^{5}	11	1.37(100%), 2.75(100%)	β^-1.394(100%)
	$Mg^{25}(n,p)Na^{25}$	.045 ± .020	60 s	4 m	1×10^{6}	15*	1.61(6.5%), .976, .58, .40	β^-3.7(55%), 2.7(45%)
	$Mg^{26}(n,\gamma)Mg^{27}$	.0002 ± .00005	9.45 m	45 m	540	3,100	.843(70%), 1.015(30%)	β^-1.75(58%), 1.59(42%)
13	$Al^{27}(n,p)Mg^{27}$	.07	9.45 m	45 m	1.56×10^{6}	1.1	.843(70%), 1.015(30%)	β^-1.75(58%), 1.59(42%)
	$Al^{27}(n,\alpha)Na^{24}$	.11	15 h	1 h	1.1×10^{5}	17.0	1.37(100%), 2.75(100%)	β^-1.394(100%)
	$Al^{27}(n,\gamma)Al^{28}$	.00053 ± .00015	2.27 m	12 m	1.18×10^{4}	140	1.78(100%)	β^-2.87(100%)
14	$Si^{28}(n,p)Al^{28}$	.22 ± .05	2.27 m	12 m	4×10^{6}	.4	1.78(100%)	β^-2.87(100%)
	$Si^{29}(n,p)Al^{29}$	.10 ± .03	6.56 m	30 m	9.7×10^{4}	17	2.43(15%), 1.28(85%)	β^-2.5(70%), 1.4(30%)
	$Si^{30}(n,\alpha)Mg^{27}$	.080 ± .016	9.45 m	40 m	5×10^{4}	30	.843(70%), 1.015(30%)	β^-1.75(58%), 1.59(42%)
	$Si^{30}(n,\gamma)Si^{31}$	.00049 ± .00005	2.62 h	1 h	74	22,000	1.26(.07%)	β^-1.4(100%)
15	$P^{31}(n,p)Si^{31}$	.077	2.62 h	1 h	3.6×10^{5}	36	1.26(.07%)	β^-1.4(100%)
	$P^{31}(n,\alpha)Al^{28}$	.150 ± .030	2.27 m	12 m	3×10^{6}	.6	1.78(100%)	β^-2.87(100%)
16	$S^{34}(n,p)P^{34}$	.085 ± .040	12.4 s	60 s	6×10^{4}	26*	2.1(25%)	β^-5.1(75%), 3.2(25%)
	$S^{34}(n,\alpha)Si^{31}$	.140 ± .030	2.62 h	1 h	2.6×10^{4}	65	1.26(.07%)	β^-1.47(100%)
17	$Cl^{35}(n,2n)Cl^{34m}$	.004 ± .001	33.2 m	1 h	4×10^{4}	44	3.22(7%), 2.10(43%), 1.16(18%)	β^+1.3, 2.48, 4.50
	$Cl^{37}(n,p)S^{37}$	.028 ± .003	5 m	20 m	1.2×10^{6}	14	3.1(90%)	β^-1.6(90%), 4.3(10%)
	$Cl^{37}(n,\alpha)P^{34}$	.19 ± .03	12.4 s	60 s	8×10^{6}	2*	2.1(25%)	β^-5.1(75%), 3.2(25%)
19	$K^{39}(n,2n)K^{38}$	.010 ± .005	7.7 m	35 m	1.4×10^{6}	1	2.16(100%)	β^+2.68(100%)
	$K^{41}(n,p)A^{41}$	.08 ± .03	109 m	60 m	2.7×10^{6}	62	1.29(99%)	β^-1.20(99%), 2.48(.9%)
	$K^{41}(n,\alpha)Cl^{38}$	.050 ± .025	37.3 m	60 m	3.8×10^{6}	43	2.15(47%), 1.60(31%)	β^-4.81(53%), 2.77(16%), 1.11(31%)
22	$Ti^{48}(n,p)Sc^{48}$	.09 ± .03	44 h	1 h	1.3×10^{4}	128	.98(100%), 1.04(100%), 1.32(100%)	β^-.65(100%)
	$Ti^{50}(n,\gamma)Ti^{51}$	.0035 ± .0010	5.8 m	25 m	2.4×10^{5}	700	.323, .605, .928	β^-1.5(5.5%), 2.13(94.5%)
23	$V^{51}(n,p)Ti^{51}$	.027 ± .004	5.8 m	25 m	3.2×10^{5}	5.3	.323, .605, .928	β^-1.5(5.5%), 2.13(94.5%)
	$V^{51}(n,\alpha)Sc^{48}$	.030 ± .010	44 h	1 h	2.1×10^{3}	830	.98(100%), 1.04(100%), 1.32(100%)	β^-.65(100%)
24	$Cr^{52}(n,p)V^{52}$	.070 ± .011	3.76 m	20 m	7.7×10^{5}	2	1.43(100%)	β^-2.47(100%)
25	$Mn^{55}(n,\alpha)V^{52}$	.030 ± .012	3.76 m	20 m	3.3×10^{5}	5	1.43(100%)	β^-2.47(100%)
26	$Fe^{56}(n,p)Mn^{56}$	.110 ± .010	2.58 h	1 h	2.6×10^{6}	6.5	.085, 1.81, 2.13	β^-2.81(50%), 1.04(30%), .065(20%)
27	$Co^{59}(n,\alpha)Mn^{56}$	.031 ± 003	2.58 h	1 h	7.4×10^{4}	22.5	.085, 1.81, 2.13	β^-2.81(50%), 1.04(30%), .065(20%)
28	$Ni^{58}(n,2n)Ni^{57}$	.04 ± .01	36 h	1 h	1.4×10^{3}	1,200	0.127(14%), .40(.05%), 1.37(86%), 1.89(14%)	β^+.85, .72, .35
	$Ni^{61}(n,p)Co^{61}$	.180 ± .025	99 m	1 h	7.9×10^{3}	211	.072(100%)	β^-1.22(95%)
29	$Cu^{63}(n,2n)Cu^{62}$	.50	9.8 m	40 m	3.2×10^{6}	.52	.66(2%), .85(1%), 1.18(1%), 1.35(1%), 1.46(1%), 1.98(1%), 2.24(1%)	β^+2.91
	$Cu^{65}(n,2n)Cu^{64}$	1 ± .1	12.8 h	1 h	1.54×10^{5}	11	1.34(.5%)	β^+.657(60%); β^-.571(39)%
	$Cu^{63}(n,\gamma)Cu^{64}$	.0026	12.8 h	1 h	934	1,780	1.34 (Weak)	β^-.571(39%); β^+.657(19%); E.C. 42%
	$Cu^{65}(n,\gamma)Cu^{66}$	.0062	5.1 m	25 m	1.82×10^{4}	92	1.04(9%), 0.83(.2%)	β^-2.63(91%), 1.5(9%)
30	$Zn^{64}(n,p)Cu^{64}$	.39 ± .06	12.8 h	1 h	9.3×10^{4}	18	1.34(.5%)	β^+.657(60%); β^-.571(39%)
	$Zn^{64}(n,2n)Zn^{63}$	.22 ± .04	38.3 m	1 h	6.6×10^{5}	2.7	.96(8%), 1.89(4%), 2.60(.5%)	β^+2.36, 1.40, .50
	$Zn^{66}(n,p)Cu^{66}$	.100 ± .017	5.1 m	25 m	2.5×10^{5}	6.7	1.04(100%), .83(.2%)	β^-2.63(91%), 1.5(9%)
	$Zn^{68}(n,\alpha)Ni^{65}$	.0079 ± .0008	2.56 h	1 h	3.3×10^{3}	508	1.49, 1.12, .37	β^-2.10(57%), 1.01(14%), .6(29%)
31	$Ga^{69}(n,p)Zn^{69m}$	.024 ± .019	14 h	1 h	5.2×10^{3}	318	.438(100%)	β^-.897 (From Zn^{69})
	$Ga^{69}(n,\alpha)Cu^{66}$	.039 ± .008	5.1 m	25 m	2.0×10^{6}	8.2	1.04(100%), .83(.2%)	β^-2.63(91%), .15(9%)
	$Ga^{69}(n,2n)Ga^{68}$	.550 ± .170	68 m	1 h	1.4×10^{6}	1.1	1.07, .81, 1.24	β^+1.88, .77
	$Ga^{71}(n,2n)Ga^{70}$	.700 ± .100	21.4 m	1 h	2.1×10^{6}	.8	.173(.44%), 1.04(.76%), 1.25	β^-1.65(99%), .61(.3%), .44(1.5%)
	$Ga^{71}(n,\gamma)Ga^{72}$	.0019 ± .0002	14.2 h	1 h	313	5,320	.63(24%), .68(<2%), .84(100%), 1.05(5%), 1.20(<2%), 1.59(5%), 1.87(8%), 2.2(33%), 2.51(26%)	β^-.64(42%), .96(31%), 1.51(10%), 2.53(9%), 3.17(8%)
32	$Ge^{70}(n,p)Ga^{70}$	.130 ± .080	21.4 m	1 h	1.95×10^{5}	8.8	.173(.44%), 1.04(.70%), 1.25	β^-1.65(99%), .61(.3%), .44(1.5%)
	$Ge^{70}(n,2n)Ge^{69}$	.700 ± .200	36.9 h	1 h	2.26×10^{4}	73	.090, .388, .576, .870, 1.12, 1.34, 1.61	β^+1.215, .610, .22

* Sensitivities marked with an asterisk indicate irradiation products with half-lives less than 1 min; for these short half-lives, "in-beam" counting or fast pneumatic sample transfer is probably necessary.

Z	Reaction	σ (barns)	$T_{1/2}$	t	R	Sensitivity (μg)	Gamma radiation	Other radiation
	$Ge^{72}(n,p)Ga^{72}$	.065 ± .025	14.2 h	1 h	6.45×10^5	260	.63(24%), .68(<2%), .84(100%), 1.05(5%), 1.20(<2%), 1.57(5%), 1.87(8%), 2.1(33%), 2.51(26%)	β^-.04(42%), .96(31%), 1.51(10%), 2.53(9%), 3.17(8%)
	$Ge^{73}(n,p)Ga^{73}$	.140 ± .070	5 h	1 h	1.16×10^6	167	.0135, .054	β^-1.4(100%)
	$Ge^{74}(n,\alpha)Zn^{71}$	.015 ± .006	2.2 m	10 m	4.55×10^6	36.9	.12, .51	β^-2.4
	$Ge^{76}(n,2n)Ge^{75}$	1.8 ± .5	82 m	1 h	4.56×10^5	3.6	.066, .199, .264, .427, .477, .682	β^-1.14(85%), .614(15%)
33	$As^{75}(n,p)Ge^{75}$	.012 ± .002	82 m	1 h	3.8×10^4	43	.066, .199, .264, .427, .477, .682	β^-1.14(85%), .614(15%)
	$As^{75}(n,\alpha)Ga^{72}$	.012 ± .002	14.2 h	1 h	4.6×10^3	361	.63(24%), .68(<2%), .84(100%), 1.05(5%), 1.20(<2%), 1.57(5%), 1.87(8%), 2.1(33%), 2.51(26%)	β^-.64(42%), .96(31%), 1.51(10%), 2.53(9%), 3.17(8%)
34	$Se^{77}(n,p)As^{77}$	.045 ± .020	39 h	1 h	4.2×10^3	398	.86(.13%), .160(.26%), .245(2.5%), .525(.8%)	β^-.7(98%)
	$Se^{80}(n,\alpha)Ge^{77}$	.040 ± .016	12 h			Both 12 h and 52 s isomers produced		
	$Se^{82}(n,2n)Se^{81}$	1.5 ± .5	57 m	1 h	1.05×10^6	1.6	.103	β^-1.38(100%) From 18 Min Se^{81}
35	$Br^{79}(n,2n)Br^{78}$	1.1 ± .25	6.4 m	30 m	1.8×10^5	.4	.108, .046	From Br^{78} β^+2.4
	$Br^{81}(n,\alpha)As^{78}$	.10 ± .02	90 m	1 h	1.36×10^5	12.2	.615, .700, 1.32, 2.65	β^-4.1(70%), 1.4(30%)
	$Br^{81}(n,2n)Br^{80}$	.80 ± .16	4.5 h	1 h	3.9×10^5	4.28	.049, .037	β^+ .87; β^-1.99, 1.38
	$Br^{81}(n,\gamma)Br^{82}$	.0035 ± .0007	35.9 h	1 h	2.21×10^3	7,540	.554, .618, .698, .777, .827, 1.044, 1.317, 1.475	β^-.44
	$Br^{79}(n,\alpha)As^{76}$	.010 ± .002	26.5 h	1 h	9.83×10^3	1,700	.56(45%)	β^-2.97(51%), 2.41(31%), 1.76(16%), .36(3%)
37	$Rb^{87}(n,\alpha)Br^{84}$	.040 ± .016	30 m	1 h	5.9×10^4	28.3	.27, .35, .43, .47, .52, .61, .74, .81, .88	β^-4.68(40%), 3.56(9%), 2.53(16%), 1.72(35%)
38	$Sr^{88}(n,\alpha)Kr^{85}$	.06 ± .02	4.4 h	1 h	5.3×10^4	31.4	.149, .305	β^-.824
	$Sr^{88}(n,p)Rb^{88}$	.018 ± .004	17.7 m	1 h	1.24×10^5	13.5	.908, 1.39, 1.85, 2.11, 2.68, 3.01, 3.24, 3.52, 3.68, 4.87	β^-5.3(78%), 3.6(13%), 2.5(9%)
40	$Zr^{90}(n,\alpha)Sr^{87}$	.0032 ± .0002	2.84 h	1 h	2.38×10^3	700	.388(100%)	
	$Zr^{90}(n,2n)Zr^{89}$	.080 ± .040	4.4 m	20 m	2.43×10^5	6.75	.588, 1.53	β^+2.43
	$Zr^{94}(n,p)^{94}$	.011 ± .004	16.5 m	1 h	1.26×10^4	132	1.4	β^-5.4
	$Zr^{94}(n,\alpha)Sr^{91}$	.0039 ± .0003	9.7 h	1 h	3.1×10^2	5,400	.551, .645, .748, .93, 1.025, 1.413	β^-2.67(26%), 2.03(4%), 1.36(29%), 1.09(33%), .62(7%)
	$Zr^{96}(n,\gamma)Zr^{97}$	.004	17 h	1 h	29	56.000	1.35(4%), 1.62(2%), 2.2(2%), 2.58	β^-1.91
42	$Mo^{92}(n,2n)Mo^{91}$	.19	15.5 m	1 h	$1.89 = 10^5$	8.8	Assume yield is Mo^{91} and not Mo^{91m}	β^+3.44
	$Mo^{97}(n,p)Nb^{97}$	.11 ± .05	72 m	1 h	2.74×10^5	6.08	.665	β^-1.27
44	$Ru^{96}(n,2n)Ru^{95}$	.48 ± .09	1.65 h	1 h	5.3×10^4	30	.145, .340, .640, 1.11	β^+1.1
	$Ru^{101}(n,p)Tc^{101}$	.0020 ± .0014	14.3 m	1 h	2.0×10^3	833	.127, .130, .183, .186, .235, .307, .385, .41, .545, .64, .72, .85, .94	β^-1.32, 1.07
	$Ru^{104}(n,\gamma)Ru^{105}$	.014 ± .003	4.5 h	1 h	2.32×10^3	719	.726	β^-1.15
45	$Rh^{103}(n,\alpha)Tc^{100}$	.060 ± .025	15.7 s	1.5 m	3.5×10^5	5	.54, .60, others	β^-3.38, 2.88
46	$Pd^{104}(n,p)Rh^{104}$	.13 ± .08	44 s			4.4 m isomer also produced		
	$Pd^{105}(n,p)Rh^{105}$	.7 ± .5	36 h	1 h	1.69×10^4	98.3	.32, others	β^-.57(96%), .25(4%)
	$Pd^{110}(n,\alpha)Ru^{107}$	.014 ± .006	4 m	20 m	1.04×10^4	160		β^-4
	$Pd^{110}(n,2h)Pd^{109}$	2.0 ± 1.0	13.6 h	1 h	7.4×10^4	22	.307, .320, .325, .412, .425, .448, .55, .64, .77 (All γ's weak)	β^-1.02
	$Pd^{108}(n,\alpha)Ru^{105}$	.0022 ± .0005	4.5 h	1 h	485	3,430	.726	β^-1.15
47	$Ag^{109}(n,2n)Ag^{108}$	.8 ± .3	2.3 m	10 m	2.64×10^6	.77	.43, .62	β^-1.77(97%), E.C.1.6%
	$Ag^{107}(n,2n)Ag^{106}$	.55 ± .10	24 m	1 h	1.3×10^6	1.3	.51(17%)	β^+1.95, 1.45, β^-.36
	$Ag^{109}(n,p)Pd^{109}$	.0125 ± .0020	13.6 h	1 h	1.47×10^3	1,180	.307, .320, .325, .412, .425, .448, .55, .64, .77 (All γ's weak)	β^-1.02
49	$In^{115}(n,\alpha)Ag^{112}$	.0029 ± .0003	3.2 h	1 h	3.66×10^3	455	.618, 1.10, 1.39, 1.62, 1.83, 2.11, 2.51, 2.79	β^-4.1(25%), 3.5(40%), 2.7(20%), 1.0(15%)
51	$Sb^{121}(n,2n)Sb^{120}$	.750 ± .200	16.5 m	1 h	2.27×10^6	.734	1.18(1%)	β†1.70, E.C.
52	$Te^{130}(n,2n)Te^{129}$	.60 ± .12	72 m + 33 d	1 h	4.26×10^5	3.91	Mixed isotope yield	
	$Te^{128}(n,2n)Te^{127}$	.80 ± .20	9.3 h	1 h	9.5×10^4	17	.36(.1%), .418(.8%), .059(.05%), .145(.007%), .203, .215	β^-0.70(99%)
	$Te^{130}(n,\alpha)Sn^{127}$	.0005 ± .0001	1.5 h	1 h	18×10^3	5,550		β^-
53	$I^{127}(n,p)Te^{127}$	.23 ± .14	9.3 h	1 h	5.9×10^3	280	.059(.05%), .145(.007%), .203, .215, .360(0.1%), .418(.8%)	β^-0.70(99%)
	$I^{127}(n,\alpha)Sb^{124m}$	.018 ± .003	20 m	1 h	7.4×10^4	22	.0185	
	$I^{127}(n,\gamma)I^{128}$	.0025 ± .0005	25 m	1 h	9.6×10^3	175	.75(.3% with E.C.), .46(17%), .54(1.8%), .99(.3%)	β^-2.12(76%), 1.67(16%), 1.13(2%)
55	$Cs^{133}(n,\alpha)I^{130}$	.0015 ± .0002	12.6 h	1 h	368	4,500	.409, .528, .66, .744, 1.15	β^-.60(54%), 1.02(46%)
56	$Ba^{138}(n,p)Cs^{138}$	.006 ± .002	33 m	1 h	1.34×10^4	166	.1389(2%), .193(.8%),	β^-3.40

Z	Reaction	σ (barns)	$T_{1/2}$	t	R	Sensitivity (μg)	Gamma radiation	Other radiation
							.229(1.6%), .411(3%), .463(23%), .550(8%), .87(4%), 1.01(25%), 1.43(73%), 2.21(18%), 2.63(9%), 3.34(0.5%)	
	$Ba^{138}(n,\gamma)Ba^{139}$	.0013 ± .0005	85 m	1 h	1.6×10^3	1,000	.163(26%), 1.05(.6%)	β^-2.38(15%), 2.23(66%), 0.82(19%)
57	$La^{139}(n,p)Ba^{139}$	.006 ± .003	85 m	1 h	9.8×10^3	170	.163(26%), 1.05(.6%)	β^-2.38(15%), 2.23(66%), .82(19%)
	$La^{139}(n,\gamma)La^{140}$	.0015 ± .0002	40.2 h	1 h	110	15,100	.3286, .4867, .8151, 1.596	β^-2.20(8%), 1.62(14%), 1.36(30%), 1.15(20%), .86(12%), .42(16%)
58	$Ce^{140}(n,\alpha)Ba^{137m}$	.012 ± .006	2.6 m	15 m	4.6×10^4	37	.6616(100%)	None
	$Ce^{140}(n,p)La^{140}$	.012 ± .001	40.2 h	1 h	770	2,200	.3286, .4867, .8151, 1.596	β^-2.20(8%), 1.62(14%), 1.36(30%), 1.15(20%), .86(12%), .42(16%)
	$Ce^{142}(n,\alpha)Ba^{139}$	.007 ± .001	85 m	1 h	1.25×10^3	1,300	.163(26%), 1.05(.6%)	β^-2.38(15%), 2.23(66%), .82(19%)
	$Ce^{142}(n,\gamma)Ce^{143}$	≤ .008	33 h	1 h	79	21,000	.29(43%), others	β^-1.40(37%), 1.13(40%), .74(5%), .50(12%), .2(6%)
	$Ce^{142}(n,p)La^{142}$	.009 ± .001	77 m	1 h	1.76×10^3	950	.63, .87, others	β^-<2.5
59	$Pr^{141}(n,2n)Pr^{140}$	2.1 ± .7	3.4 m	15 m	9×10^6	.2	None	β^+2.23(54%), E.C.(46%)
	$Pr^{141}(n,\gamma)Pr^{142}$	.0033 ± .0003	19.2 h	1 h	490	3,400	1.57(4.1%)	β^-2.17(92%), .59(8%)
60	$Nd^{142}(n,p)Pr^{142}$	.0135 ± .0020	19.2 h	1 h	561	3,000	1.57(4.1%)	β^-2.17(92%), .59(8%)
	$Nd^{146}(n,\alpha)Ce^{143}$	.003 ± .0004	33 h	1 h	44	38,000	.0574, .232, .294(43%), .351, .493, .565, .668, .722, .861, 1.10	β^-1.40(37%), 1.13(40%), .74(5%), .50(12%), .2(6%)
62	$Sm^{152}(n,\alpha)Nd^{149}$	.010 ± .005	2.0 h	1 h	2.36×10^3	700	.030, .097, .112, .114, .124, .188, .198, .211, .226, .240, .266, .424, .538, .650	β^-1.5, 1.1, .95
	$Sm^{154}(n,2n)Sm^{153}$	.22 ± .09	47 h	1 h	3×10^3	570	.103, .070	β^-.80(21%), .69(70%), .26(9%)
63	$Eu^{153}(n,p)Sm^{153}$	.0075 ± .0008	47 h	1 h	237	7,000	.103, .070	β^-.80(21%), .69(70%), .26(9%)
64	$Gd^{160}(n,2n)Gd^{159}$	1.5 ± .8	18 h	1 h	4.7×10^4	35	.0575, .36(12%)	β^-.95(80%), .60(20%)
	$Gd^{156}(n,\alpha)Sm^{153}$	.0032 ± .0005	47 h	1 h	35	47,600	.103, .070	β^-.80(21%), .69(70%), .26(9%)
	$Gd^{160}(n,\gamma)Gd^{161}$	.019 ± .005	3.73 m	16 m	1.6×10^4	110	.0568, .078, .1020, .1662, .1808, .267, .284, .316, .361, .482, .526	β^-1.5
66	$Dy^{162}(n,\alpha)Gd^{159}$	.0036 ± .0005	18 h	1 h	129	12,900	.0575, .36(12%)	β^-.95(80%), .60(20%)
73	$Ta^{181}(n,2n)Ta^{180m}$	.9 ± .2	8.15 h	1 h	2.4×10^5	7	.093, .102, .2 (weak), .4 (weak)	β^-.71(50%), .61(50%)
75	$Re^{187}(n,p)W^{187}$	.0040 ± .0004	23.9 h	1 h	240	6,900	.69(29%), Others	β^-1.33(20%), .63(70%), .34(10%)
77	$Ir^{193}(n,p)Os^{193}$	.0027 ± .0005	31 h	1 h	114	14,700	.251, .281, .321, .362, .388, .460, .558	β^-1.14(40%), 1.06(33%), 1.00(5%), .86(12%), .68(10%)
	$Ir^{191}(n,\alpha)Re^{188}$	.0025 ± .0003	17 h	1 h	93	18,000	.1551(9%)	β^-2.12(79%), 1.96(20%)
78	$Pt^{198}(n,2n)Pt^{197}$	2.8 ± 1.5	18 h	1 h	2.5×10^5	7	.077, 0.191	β^-.670, .479, .468
	$Pt^{194}(n,p)Ir^{194}$	.0039 ± .0004	19 h	1 h	140	11,800	.3291 (Many Others)	β^-2.24(66%), 1.91(15%), .98(10%), .43(8%)
	$Pt^{195}(n,p)Ir^{195}$	.0029 ± .0003	2.3 h	1 h	780	2,200	.42, .66, .88	β^-2.1, 1.3
79	$Au^{197}(n,2n)Au^{196}$	2.6 ± .2	14 h + 5.5 d		Mixed yield			
	$Au^{197}(n,\alpha)Ir^{194}$	.0005 ± .00005	19 h	1 h	56	30,200		β^-2.24(66%), 1.91(15%), .98(10%), .43(8%)
	$Au^{197}(n,p)Pt^{197}$	.021 ± .008	1.4 + 19 h		Mixed yield		.3291, Others	
80	$Hg^{200}(n,p)Au^{200}$	.0036 ± .0004	48 m	1 h	1.45×10^3	1,150	.367(24%), 1.23(24%), 1.36(<1%)	β^-2.18(76%), .6(24%)
	$Hg^{201}(n,p)Au^{201}$	.0021 ± .0003	26 m	1 h	664	2,500	.55	β^-1.5
	$Hg^{202}(n,\alpha)Pt^{199}$	.001 ± .0001	31 m	1 h	665	2,500	.074, .197, .246, .318, .475, .54, .72, .79, .96	β^-.8, 1.1, 1.3, 1.7
81	$Tl^{205}(n,p)Hg^{205}$	.0030 ± .0015	5.5 m	25 m	6.21×10^3	268	.203	β^-1.8
	$Tl^{203}(n,\alpha)Au^{200}$	.0004 ± .00004	48 m	1 h	200	8,350	.367(24%), 1.23(24%), 1.36(<1%)	β^-2.18(76%), .6(24%)
	$Tl^{205}(n,\gamma)Tl^{206}$	.002 ± .0004	4.19 m	20 m	4.2×10^3	392	None	β^-1.51
82	$Pb^{208}(n,p)Tl^{208}$	.001 ± .001	3.1 m	12 m	1.53×10^3	1,100	2.62(100%), .582(80%), Others	β^-1.792
	$Pb^{206}(n,\alpha)Hg^{203}$	.002 ± .0004	5.5 m	25 m	3.0×10^3	550	.203	β^-1.8
	$Pb^{208}(n,\gamma)Pb^{209}$	.003 ± .0005	3.2 h	1 h	886	1,880	None	β^-.635
83	$Bi^{209}(n,\alpha)Tl^{206}$	.001 ± .0005	4.19 m	20 m	2.88×10^3	575	None	β^-1.51
	$Bi^{209}(n,p)Pe^{209}$	.001 ± .0005	3.2 h	1 h	550	3,030	None	β^-.635

Reaction-Product Half-Lives Too Long

Z	Reaction	σ (barns)	$T_{1/2}$	Z	Reaction	σ (barns)	$T_{1/2}$	Z	Reaction	σ (barns)	$T_{1/2}$
3	$Li^6(n,\alpha)H^3$	.026	12.3 y	33	$As^{75}(n,2n)As^{74}$	.540 ± .160	17.5 d	53	$I^{127}(n,2n)I^{126}$	1.1	13 d
5	$B^{10}(n,12\alpha)$	.08	12.3 y	39	$Y^{89}(n,\alpha)Rb^{86}$	.07 ± .04	19 d	56	$Ba^{136}(n,p)Cs^{136}$	.038	12.9 d
11	$Na^{23}(n,2n)Na^{22}$	.014 ± .002	2.6 y		$Y^{89}(n,\gamma)Y^{90}$	.0029 ± .0003	64 h	57	$La^{139}(n,\alpha)Cs^{136}$	.002 ± .0002	12.9 d
16	$S^{32}(n,p)P^{32}$	.37 ± .04	14.3 d	40	$Zr^{90}(n,p)Y^{90}$	.25 ± .10	64 h	60	$Nd^{143}(n,p)Pr^{143}$	.012 ± .001	13.7 d
17	$Cl^{35}(n,\alpha)P^{32}$	.14 ± .035	14 d	41	$Nb^{93}(n,\alpha)Y^{90}$	.010 ± .001	64 h	64	$Gd^{157}(n,p)Eu^{157}$	.011 ± .002	15.4 d
23	$V^{51}(n,2n)V^{50}$	.0007 ± .0001	>10^{14} y	42	$Mo^{100}(n,2n)Mo^{99}$	4.0	67 h	79	$Au^{197}(n,2n)Au^{196}$	1.8 ± .5	5.5 d
29	$Cu^{63}(n,p)Ni^{63}$	.019 ± .004	85 y	51	$Sb^{123}(n,2n)Sb^{122}$	1.2 ± .3	2.75 d				

NaI and CsI Efficiencies and Photofractions for Gamma-Ray Detection

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EFFICIENCIES and photofractions for gamma-ray interactions in sodium-iodide and cesium-iodide crystals are of importance in the design of spectrometers and in the analysis of gamma-ray spectra. The theoretical results presented herein were calculated by a Monte Carlo method that simulates actual processes undergone by incident gamma rays and all subsequent radiation (*1–5*).

The primary processes considered in the calculations were Rayleigh and Compton scattering, photoelectric effect and pair production. The secondary radiations considered were scattered gammas in Rayleigh and Compton scattering, fluorescent x-rays, annihilation gammas, bremsstrahlung photons, Compton-scattered electrons, photoelectrons and pair-produced electrons and positrons. The cross sections employed are given in Refs. *6–8*.

The crystals considered were right circular cylinders. The interaction ratio is the ratio of the number of gammas that interact at least once to the number that strike the crystal face. The detection efficiency is the ratio of the number of gammas that interact at least once to the total number of gammas that are emitted by the source in 2π geometry. The photofraction is the fraction of interacting gammas that is completely absorbed.

For these calculations, sufficient histories were run to obtain 10,000 primary interactions. (For method of calculation, see Ref. *4*.)

* * *

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TABLE 1—Detection Characteristics for Disk Source and NaI Crystal*

Crystal size, dia. × ht. (in.)	*Energy (Mev)*								
	0.661	*1.330*	*2.620*	*4.450*	*6.130*	*8.000*	*9.000*	*11.00*	*13.00*
				Interaction Ratios					
7 × 7	0.773	0.691	0.628	0.597	0.595	0.601	0.607	0.617	0.619
5 × 5	0.716	0.628	0.548	0.528	0.523	0.525	0.534	0.539	0.555
3 × 3	0.643	0.529	0.450	0.417	0.420	0.422	0.429	0.434	0.446
				Photofractions					
7 × 7	0.738	0.609	0.497	0.422	0.374	0.345	0.338	0.304	0.285
5 × 5	0.687	0.527	0.394	0.331	0.279	0.241	0.228	0.193	0.167
3 × 3	0.568	0.389	0.260	0.182	0.140	0.107	0.099	0.076	0.060
				Detecting Efficiencies					
7 × 7	0.00541	0.00494	0.00446	0.00425	0.00424	0.00425	0.00433	0.00436	0.00439
5 × 5	0.00259	0.00229	0.00199	0.00190	0.00190	0.00191	0.00195	0.00195	0.00204
3 × 3	0.00079	0.00065	0.00056	0.00052	0.00052	0.00052	0.00053	0.00054	0.00055

* Source is on crystal axis and 10 cm above crystal face. Disk radius equals crystal radius.

TABLE 2—Point Source 10 cm from CsI Crystal and on Crystal Axis

Crystal size, dia. × ht. (in.)	*Energy (Mev)*				
	0.279	*0.661*	*1.330*	*2.620*	*4.450*	*6.130*
			Interaction Ratios			
3 × 3	0.853	0.679	0.562	0.493	0.473	0.477
2 × 2	0.841	0.621	0.496	0.421	0.404	0.410
1 × 1	0.787	0.484	0.353	0.289	0.274	0.279
½ × ½	0.629	0.320	0.218	0.178	0.167	0.169
			Photofractions			
3 × 3	0.890	0.649	0.477	0.331	0.244	0.207
2 × 2	0.865	0.546	0.373	0.237	0.159	0.115
1 × 1	0.779	0.393	0.235	0.114	0.059	0.033
½ × ½	0.655	0.269	0.139	0.048	0.015	0.004

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TABLE 3—Broad Parallel Beam Incident on NaI Crystal

Crystal size, dia. × ht. (in.)	Energy (Mev) 0.142	0.279	0.661	1.170	1.330	2.620	4.450	6.130	7.100	8.00	10.00	12.00	14.00
						Interaction Ratios							
8 × 8	1.000	1.000	0.997	0.982	0.978	0.944	0.924	0.924	0.923	0.929	0.934	0.941	0.950
6 × 6	1.000	1.000	0.988	0.955	0.943	0.884	0.857	0.853	0.858	0.868	0.867	0.880	0.892
4 × 4	1.000	0.998	0.945	0.867	0.846	0.761	0.726	0.727	0.726	0.734	0.744	0.754	0.772
3 × 3	1.000	0.994	0.888	0.780	0.753	0.652	0.618	0.614	0.625	0.632	0.641	0.652	0.665
2 × 2	1.000	0.966	0.765	0.631	0.612	0.510	0.477	0.479	0.471	0.484	0.487	0.508	0.516
1 × 1	0.999	0.819	0.516	0.395	0.374	0.297	0.278	0.276	0.279	0.283	0.285	0.304	0.306
½ × ½	0.960	0.576	0.299	0.222	0.211	0.164	0.150	0.147	0.151	0.154	0.157	0.162	0.164
						Photofractions							
8 × 8	0.968	0.928	0.780	0.717	0.695	0.580	0.517	0.474	0.449	0.444	0.415	0.399	0.380
6 × 6	0.968	0.925	0.759	0.639	0.612	0.492	0.411	0.363	0.344	0.327	0.315	0.286	0.255
4 × 4	0.967	0.902	0.652	0.518	0.488	0.359	0.273	0.223	0.204	0.192	0.165	0.147	0.120
3 × 3	0.964	0.887	0.578	0.420	0.397	0.272	0.209	0.167	0.123	0.113	0.095	0.077	0.058
2 × 2	0.955	0.829	0.470	0.323	0.298	0.189	0.110	0.069	0.056	0.045	0.041	0.023	0.011
1 × 1	0.942	0.726	0.312	0.196	0.169	0.085	0.033	0.014	0.009	0.008	0.004	0.0014	0.0005
½ × ½	0.907	0.610	0.219	0.106	0.093	0.035	0.0057	0.0018	0.0010	0.0002	0.0001	0.0001	0.0000

TABLE 4—Point Source 10 cm from NaI-Crystal Face and on Crystal Axis

Crystal size, dia. × ht. (in.)	Energy (Mev) 0.142	0.279	0.661	1.170	1.330	2.620	4.450	6.130	7.100	8.00	10.00	12.00	14.00
						Interaction Ratios							
8 × 8	0.969	0.882	0.754	0.687	0.670	0.606	0.586	0.579	0.590	0.585	0.598	0.611	0.612
6 × 6	0.957	0.864	0.712	0.632	0.622	0.549	0.524	0.525	0.527	0.529	0.535	0.548	0.557
4 × 4	0.943	0.829	0.654	0.576	0.552	0.472	0.459	0.444	0.451	0.457	0.464	0.476	0.485
3 × 3	0.936	0.811	0.619	0.525	0.509	0.428	0.405	0.405	0.407	0.408	0.416	0.427	0.435
2 × 2	0.932	0.780	0.564	0.468	0.435	0.360	0.345	0.338	0.341	0.345	0.349	0.365	0.370
1 × 1	0.930	0.700	0.416	0.332	0.305	0.247	0.224	0.222	0.223	0.229	0.232	0.242	0.249
½ × ½	0.902	0.520	0.266	0.198	0.187	0.145	0.134	0.132	0.135	0.137	0.142	0.145	0.149
						Photofractions							
8 × 8	0.960	0.914	0.759	0.659	0.639	0.532	0.454	0.424	0.404	0.387	0.361	0.339	0.302
6 × 6	0.964	0.905	0.707	0.591	0.566	0.448	0.362	0.325	0.308	0.299	0.266	0.241	0.210
4 × 4	0.963	0.886	0.628	0.492	0.472	0.337	0.263	0.211	0.192	0.172	0.149	0.122	0.094
3 × 3	0.959	0.861	0.562	0.410	0.392	0.262	0.186	0.138	0.118	0.102	0.088	0.063	0.048
2 × 2	0.957	0.824	0.476	0.311	0.292	0.179	0.102	0.070	0.056	0.041	0.035	0.023	0.010
1 × 1	0.938	0.717	0.320	0.194	0.169	0.085	0.034	0.015	0.0092	0.0069	0.0040	0.0013	0.0002
½ × ½	0.896	0.606	0.223	0.112	0.099	0.032	0.0051	0.0010	0.0007	0.0005	0.0001	0.0000	0.0000

TABLE 5—Point Source on NaI-Crystal Face at Axis

Crystal size, dia. × ht. (in.)	Energy (Mev) 0.142	0.279	0.661	1.170	1.330	2.620	4.450	6.130	7.100	8.00	10.00	12.00	14.00
						Interaction Ratios							
8 × 8	1.000	1.000	0.966	0.914	0.897	0.810	0.802	0.801	0.809	0.802	0.820	0.833	0.842
6 × 6	1.000	0.996	0.930	0.849	0.828	0.750	0.714	0.711	0.717	0.717	0.727	0.739	0.748
4 × 4	1.000	0.979	0.833	0.728	0.705	0.597	0.572	0.569	0.567	0.570	0.586	0.602	0.606
3 × 3	1.000	0.955	0.740	0.627	0.603	0.499	0.467	0.468	0.475	0.473	0.486	0.495	0.510
2 × 2	0.999	0.874	0.598	0.479	0.456	0.379	0.345	0.346	0.348	0.347	0.361	0.371	0.386
1 × 1	0.976	0.657	0.370	0.281	0.262	0.212	0.192	0.193	0.191	0.176	0.198	0.206	0.214
½ × ½	0.865	0.422	0.210	0.152	0.145	0.112	0.102	0.102	0.102	0.104	0.105	0.111	0.115
						Photofractions							
8 × 8	0.912	0.879	0.764	0.666	0.626	0.531	0.455	0.424	0.407	0.390	0.377	0.356	0.309
6 × 6	0.913	0.880	0.709	0.589	0.572	0.441	0.361	0.322	0.300	0.293	0.272	0.235	0.205
4 × 4	0.916	0.870	0.627	0.479	0.460	0.320	0.252	0.203	0.183	0.167	0.139	0.118	0.086
3 × 3	0.913	0.845	0.557	0.411	0.377	0.251	0.177	0.130	0.118	0.105	0.083	0.057	0.038
2 × 2	0.919	0.796	0.457	0.314	0.294	0.172	0.101	0.062	0.049	0.043	0.032	0.017	0.008
1 × 1	0.912	0.702	0.319	0.186	0.173	0.078	0.028	0.013	0.006	0.005	0.003	0.001	0.000
½ × ½	0.879	0.595	0.221	0.114	0.092	0.031	0.0049	0.0014	0.0004	0.0004	0.0001	0.0000	0.0000

Guides for Radioiodine Concentrations in Foods

by J. H. HORTON, *E. I. du Pont de Nemours and Company, Aiken, South Carolina*

SUGGESTED RADIOACTIVITY concentration guides (RCG) are presented here as an aid in limiting the radiation dose derived from ingesting radioiodine-contaminated food. These values have been calculated on the basis of anatomical, physiological and dietary characteristics of 19 categories of persons (*1*). Because of the volatility of iodine, small quantities of I^{131} are routinely released to the environs of chemical separations facilities, and it is possible that large quantities of I^{131}, I^{132}, I^{133} and I^{135} will be released during a short time interval in the event of reactor incidents (*2*). Consequently, chronic-exposure RCG values for I^{131} and acute-exposure values for I^{131}, I^{132}, I^{133} and I^{135} are presented here in the accompanying tables.

Several organizations, including the International Commission on Radiological Protection (ICRP), the National Committee on Radiation Protection (NCRP), the National Academy of Science (NAS), and the Federal Radiation Council (FRC) (*3*), have recommended radiation protection criteria. None of these, however, have included values for radioactivity in foods. It is generally agreed that such recommendations should consider the differences between people, particularly between children and adults (*3, 4*).

The RCG values are based on the assumption that only a particular food is contaminated. Consumption of a food containing the limiting RCG of a radioiodine isotope will contribute a radiation dose of 60 mrem/week for continuous (chronic) exposure and 25 rem total for an acute exposure to only the limiting category of people. Other categories of people will receive a smaller dose.

The data used in the calculations were selected to represent the average individual for each category of persons. We realize that the results can be refined when more data are available. This is particularly true of the possible differences in the effective half-lives of radioiodine isotopes for the various categories of people. Also it is doubtful that all categories of people should receive the same radiation dose to the thyroid; the thyroids of children may be more sensitive to radiation than the thyroids of adults. On the other hand, because the age categories for "children," "boys" and "girls" cover spans of 3 months to 4 yr and those for adults may span more than 50 yr, the possible length of exposure of children is necessarily less than for most adults.

TABLE 1—Weight of Human Thyroid

Age (yr)	*Weight (gm)*
Birth–1	2
1– 3	3
4– 6	6
7– 9	9
10–12	12
13–15	14
16–20	18
Standard man	20

CHRONIC-EXPOSURE VALUES

Equation 1 for RCG in food was derived from ICRP equations (*5*) for the maximum permissible body burden and the maximum permissible concentrations in air and water

$$\mathrm{RCG} = \frac{1.94 \times 10^{-3} mR}{ITf(1 - e^{-0.693t/T})E} \quad (1)$$

[Here RCG is $\mu c/cm^3$ or $\mu c/gm$, m = mass (gm) of the organ of reference (thyroid), R = dose rate (rem/week), I = average daily food intake (cm^3 or gm), T = effective half-life of the radionuclide (days), f = fraction of radionuclide intake reaching the thyroid, t = length of exposure (days) and E = effective absorbed energy of the emissions from the radionuclide (Mev/disintegration).]

Data Used

Thyroid mass (m). The human-thyroid weights listed in Table 1 for birth to maturity are based on data (*4*) through which a "best-fitting" curve was drawn. For mature individuals, the standard-man value (*5*) was used.

Dose rate (R). The maximum dose rate of 0.06 rem/week recommended by the NCRP (*5*) for persons in the neighborhood of controlled areas was used for calculations. If the recommendation should be changed, new levels can be determined by simple ratios.

Daily food intake (I). Food intake is based on diets recommended by the National Research Council (*6*). These were selected because they include 11 different types of foods to provide both low-cost and moderate-cost diets for 19 different categories of people according to age, sex, physical exertion, etc. To allow for differences due to income, the low-cost and moderate-cost diets were compared, and in all cases the larger of the two values was selected. These data are given in Table 2.

Effective half-life (T). Sufficient data (*7–11*) were not available for a precise determination of the effective half-life of the radioiodine isotopes in different categories of people. The effective half-life of radioiodine in children is probably shorter than in adults. Consequently, it appears safe to use the standard-man effective half-life (*5*) of 7.6 days for all categories.

Fraction reaching thyroid (f). Considerable but somewhat conflicting information is available on the fraction of the iodine intake reaching the thyroid of humans of various ages (*10, 12–27*). The reported fraction of ingested iodine reaching the thyroid ranges from 0.09 to 0.97. Factors influencing thyroid iodine uptake are inhibition of iodine uptake by certain foods (*28*), the effect of the stable iodine content of

foods (*29*) and geographical location. Except for newborn babies, results reported from studies in the United States generally indicate no larger thyroid uptake of radioiodine by children than by adults. Reports from Europe, however, show larger uptakes by children.

Although others (*2, 30–32*) have recently used larger values, the experimental results indicate that 0.3, the uptake value used by the ICRP for the standard man, is adequate for all categories of people in the United States, except possibly newborn infants. Newborn infants generally consume processed milk or are breast fed; a breast-fed infant will receive only about 10% of an oral dose given to the mother (*33*). Consequently newborn infants need not be considered.

Because the rate of radioiodine uptake reflects the level of secretory activity and basal metabolism, the use of different uptake values for each category of people would require correspondingly different effective half-lives (*7*). In fact, it has been shown that with a decreased I^{131} uptake there was an increased biological half-life (*34*).

Length of exposure (t). For con-

TABLE 2—Weekly Food Consumption*

Categories of people	*Milk*	*Eggs*	*Fruits and vegetables*†	*Meat*	*White and sweet potatoes*	*Flour and cereal*	*Fats and oils*	*Sugar, syrup and preserves*
Children								
9–12 mo	5.68	5	2.11	0.11	0.23	0.28	0.03	0.03
1– 3 yr	5.68	6	2.80	0.34	0.45	0.57	0.06	0.06
4– 6 yr	5.68	7	3.25	0.57	0.68	0.79	0.17	0.23
7– 9 yr	6.15	7	3.77	0.79	1.13	1.02	0.23	0.34
10–12 yr	6.62	7	4.12	1.02	1.36	1.47	0.34	0.40
Girls								
13–15 yr	6.62	7	4.81	1.25	1.47	1.59	0.40	0.40
16–20 yr	5.68	7	4.81	1.25	1.36	1.47	0.34	0.40
Boys								
13–15 yr	6.62	7	5.24	1.36	1.81	2.04	0.51	0.51
16–20 yr	6.62	7	6.07	1.47	2.27	2.61	0.62	0.57
Women								
Sedentary	4.73	7	4.26	1.13	1.02	0.91	0.28	0.34
Moderately active	4.73	7	4.69	1.25	1.36	1.47	0.40	0.40
Very active	4.73	7	5.57	1.36	1.81	1.93	0.51	0.51
Pregnant	7.10	7	5.14	1.36	1.13	1.13	0.28	0.28
Nursing	9.94	7	5.82	1.36	1.81	1.36	0.34	0.34
60 yr or over	5.20	6	4.39	1.13	1.13	1.02	0.23	0.28
Men								
Sedentary	4.73	7	4.69	1.25	1.36	1.47	0.40	0.40
Active	4.73	7	5.57	1.36	1.81	1.93	0.51	0.51
Heavy work	4.73	7	6.41	1.59	2.72	3.52	0.91	0.57
60 yr or over	5.20	6	4.58	1.25	1.47	1.47	0.34	0.34

* Values are in kilograms with the exception of milk (liters) and eggs (number).
† Includes dried peas, beans and nuts adjusted to the fresh weight.

TABLE 3—I^{131} RCG for Chronic Exposure (60 mrem/wk) (10^{-6} μc/gm)*

Categories of people	*Milk*	*Eggs*	*Fruits and vegetables*		*Meat*		*White and sweet potatoes*		*Flour and cereals*		*Fats and oils*	*Sugar, syrup and preserves*
			Fresh	*Dried*	*Fresh*	*Dried*	*Fresh*	*Dried*	*Fresh*	*Dried*		
Children												
9–12 mo	0.55†	620†	1.5†	11†	28	72	14	54	11	12	100	100
1– 3 yr	0.82	780	1.7	12	14†	36†	10†	38†	8.2†	9.2†	78	78
4– 6 yr	1.6	1,300	2.9	21	16	41	14	54	12	13	55	40†
7– 9 yr	2.3	2,000	3.7	26	18	46	12	46	14	16	61	41
10–12 yr	2.8	2,700	4.5	32	18	46	14	54	13	15	55	47
Girls												
13–15 yr	3.3	3,100	4.5	32	17	44	15	58	14	16	55	55
16–20 yr	4.9	4,000	5.8	38	22	56	21	81	19	21	82	70
Boys												
13–15 yr	3.3	3,100	4.2	30	16	41	12	46	11	12	43	43
16–20 yr	4.2	4,000	4.6	33	19	49	12	46	11	12	45	49
Women												
Sedentary	6.6	4,400	7.3	52	28	72	31	120	34	38	110	92
Moderately active	6.6	4,400	6.6	47	25	64	23	88	21	24	78	78
Very active	6.6	4,400	5.6	40	23	59	17	65	16	18	61	61
Pregnant	4.4	4,400	6.1	44	23	59	28	110	28	31	110	110
Nursing	3.1	4,400	5.3	38	23	59	17	65	23	26	92	92
60 yr or over	6.0	5,200	7.1	51	28	72	28	110	31	35	130	110
Men												
Sedentary	6.6	4,400	6.6	47	25	64	23	88	21	24	78	78
Active	6.6	4,400	5.6	40	23	59	17	65	16	18	61	61
Heavy work	6.6	4,400	4.9	35	20	51	11	42	8.8	10	34†	55
60 yr or over	6.0	5,200	6.8	49	25	64	21	81	21	24	92	92

* Except for milk (1×10^{-6} μc/ml) and eggs (1×10^{-6} μc/egg).
† Limiting value.

tinuous exposure, the part of Eq. 1 containing t rapidly approaches zero because of the relatively short effective half-life.

Effective gama energy (E). Because gamma absorption varies little with thyroid size, the effective energy (0.23 Mev) used by the ICRP (*5*) for the standard man is acceptable for all categories of people.

Results

The RCG values shown in Table 3 were calculated with Eq. 1 and the previously discussed data. The lowest value for each food determines the RCG value for routine monitoring. For foods that can be analyzed before or after drying, dry-weight RCG values were calculated from the fresh-food water contents with the equation

$$\text{Dry-weight RCG} = \frac{\text{Fresh-weight RCG}}{100 - \%\ \text{water}} \times 100 \quad (2)$$

Water contents used were white and sweet potatoes, 74%; flour and cereals, 11%; meat, 61%; and fresh fruits and vegetables, 86% (*6*).

ACUTE-EXPOSURE VALUES

In calculating RCG values for acute exposure in foods for a group of radionuclides, including some with extremely short half-lives, the time of day at which food is consumed must be considered. These values were calculated with Eq. 3, which was derived from equations of Dunning (*30*) and assumes that one third of the average daily food intake is taken at each of the times 6:00 a.m., 12:00 noon and 6:00 p.m.

$$\text{RCG} = \frac{mD(\lambda_r)(\lambda_r + \lambda_b)}{17IfE[1 + e^{-0.25\lambda_r} + e^{-0.5\lambda_r}]} \quad (3)$$

[RCG is in $\mu c/cm^3$ or $\mu c/gm$, m = mass of organ of reference (gm), D = total dose (rem), λ_r = radiological decay constant (day^{-1}), λ_b = biological decay constant (day^{-1}), I = average daily food intake (cm^3 or gm), f = fraction of radionuclide intake reaching thyroid, and E = effective absorbed energy (Mev/disintegration).]

TABLE 4—Nuclide Properties

Isotope	λ_r	λ_b	*E*
I^{131}	0.086	0.005	0.23
I^{132}	7.14	0.005	0.65
I^{133}	0.80	0.005	0.54
I^{135}	2.48	0.005	0.46

Data Used

Much of the data (including m, I and f) needed for calculating the acute-exposure RCG values are the same as needed for calculating the chronic-exposure values for I^{131}.

Total dose (D). The British Medical Research Council (*2*) has accepted a total thyroid dose of 25 rem as permissible under emergency conditions. This equals approximately one year's continuous maximum permissible occupational thyroid dose.

Effective gamma energy (E) and decay constants (λ_r, λ_b). The effective energy values are the same as used by the ICRP (*3*) for standard-man calculations. These values and the decay constants (*5*) are given in Table 4.

Results

Only the categories of people indicated in Table 3 to have the limiting RCG chronic-exposure values were considered for acute exposures. Results are shown in Table 5.

The British Medical Council (*2*) has recommended 0.65×10^{-4} $\mu c/cm^3$ as the maximum permissible I^{131} contamination of milk after an accidental release of radioactive materials from a nuclear reactor. The difference between their value and ours is the result of different values of f and their selection of the most cautious instead of the most probable assumptions.

TABLE 5—I^{131} RCG for Acute Exposure (25 rem total)

Food	I^{131}	I^{132}	I^{133}	I^{135}
Milk (μc/ml)	1.4×10^{-4}	8×10^{-1}	5.9×10^{-3}	9.0×10^{-2}
Eggs (μc/egg)	1.6×10^{-1}	900	6.6	100
Fruits, vegetables (μc/gm)	3.8×10^{-4}	2.1	1.6×10^{-2}	2.4×10^{-1}
	2.7×10^{-2}*	15*	1.1×10^{-1}*	1.7*
Meat (μc/gm)	3.5×10^{-2}	20	1.4×10^{-1}	2.2
	9.0×10^{-2}*	51*	3.6×10^{-1}*	5.6*
White, sweet potatoes (μc/gm)	2.7×10^{-3}	15	1.1×10^{-1}	1.7
	1×10^{-2}*	58*	4.2×10^{-1}*	6.5*
Flour, cereals (μc/gm)	2.1×10^{-3}	12	8.6×10^{-2}	1.3
	2.4×10^{-2}*	13*	9.7×10^{-1}*	1.5*
Fats, oils (μc/gm)	8.8×10^{-3}	49	3.6×10^{-1}	5.5
Sugar, syrup, preserves (μc/gm)	1×10^{-2}	58	4.3×10^{-1}	6.5

* Dry weight.

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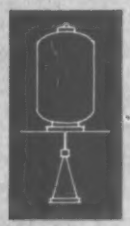

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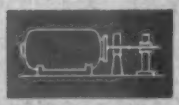
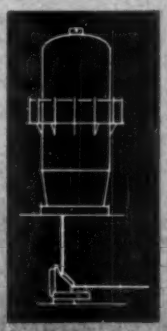
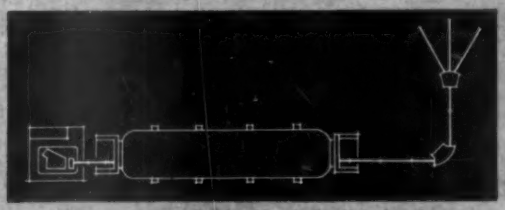


Van de Graaff Positive Ion Accelerator and neutron source — for research and activation analysis. Pulsed or continuous operation. 0.4 to 3 Mev up to 400 ma.



Van de Graaff Positive Ion Accelerator with heavy ion sources, nano-second pulsing — 5.5 Mev. with 90° beam analyzer.



Tandem Van de Graaff Positive Ion Accelerator — 6 to 20 Mev. (3-stage) with 90° beam analyzer and 3-portal switching magnet.

FOXBORO Electronic Consotrol Control Panel for portable nuclear power plant is designed for one-man operation.

reactor control – plant control – radiation monitoring . . . they're all on this compact Foxboro Electronic Control Panel

SKID-MOUNTED Foxboro Consotrol panel, enclosed in a protective housing, will be "air-lifted" to its Air Force site, 6500 ft. up in the Wyoming mountains.

One skid — that's all the room allowed for control instrumentation on The Martin Company's PM-1 portable nuclear power plant.

The plant — being built for the Air Force under contract to the AEC — will produce both 1000 kilowatts of electrical power and 7 million btu per hour heat for a remote Air Force station high in the Wyoming mountains.

For the PM-1 Reactor, dependable Foxboro Electronic Consotrol* instruments were specified. 100% solid state — no vacuum tubes to replace — instantaneous response. And they're so compact that both nuclear and process control, as well as radiation monitoring, are included on the same operating console.

Compactness — reliability — proven performance — Foxboro Electronic Consotrols are ideal for both nuclear and conventional power plant control systems. Ask your Foxboro Field Engineer to show you the reasons why. Or write for Bulletin 1-17. The Foxboro Company, 6211 Neponset Ave., Foxboro, Massachusetts.

*Reg. U.S. Pat. Off.

FOXBORO

REG. U. S. PAT. OFF.

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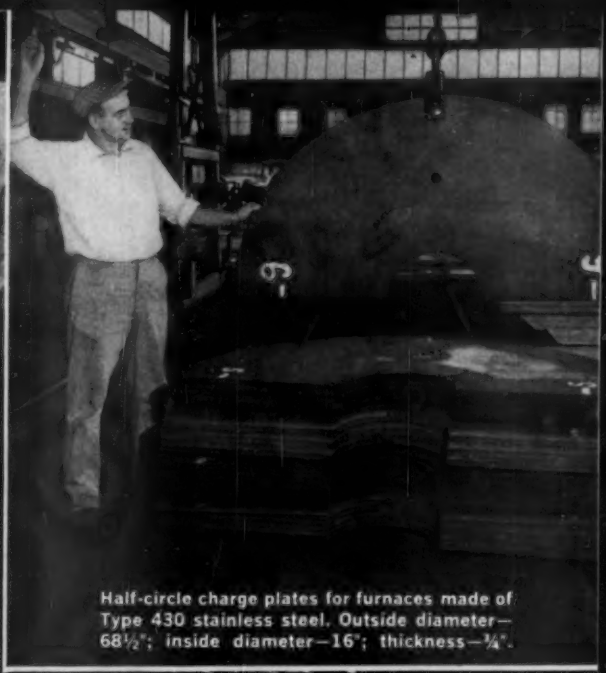
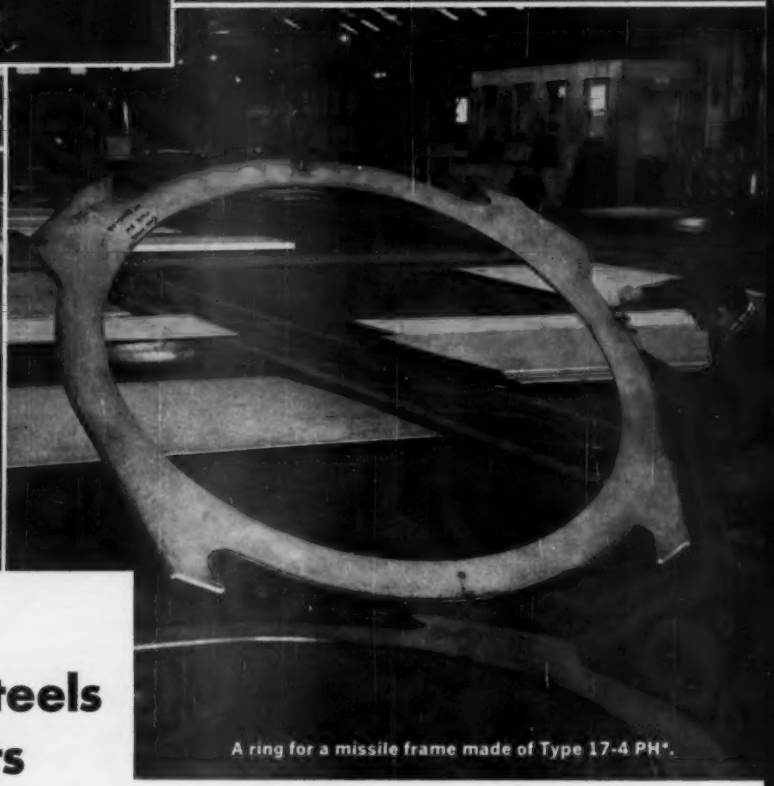
Indexing plate for nuclear storage cask. Type 304. Outside diameter—44⅛"; thickness—2¼".



Half-circle charge plates for furnaces made of Type 430 stainless steel. Outside diameter—68½"; inside diameter—16"; thickness—¾".

Type 321 stainless steel segments for cryogenic vessels. Inside diameter—104"; thickness—4¹¹⁄₁₆".



A ring for a missile frame made of Type 17-4 PH*.

special shapes special stainless steels for special projects

Producing stainless steel plate, plate products, and forgings is our business. Orders often call for unusual shapes in stainless plate, shapes that will become important components in special projects. Whatever the requirement, your confidence in Carlson specialists is well placed.

A Carlson booklet, "Producing Stainless Steels . . . Exclusively," is now available. Why not write for your personal copy today?

*(trade-mark of ARMCO STEEL CORPORATION)

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Producers of Stainless Steel

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District Sales Offices in Principal Cities

Plates • Plate Products • Heads • Rings • Circles • Flanges • Forgings • Bars and Sheets (No. 1 Finish)

DEPENDABILITY IN RADIOCHEMICALS

A heavily screened bench at the Radiochemical Centre for chemistry with radioisotopes.

NEUTRON SOURCES for nuclear reactors

Polonium-210 and radium-226 are frequently used as the basis of neutron sources for commissioning nuclear reactors, but another alpha emitter now becoming available for this purpose is thorium-228. For example, this is being used for the Central Electricity Generating Board's power reactors at Bradwell and Berkeley.

	Emission (neutrons/second/curie)	Half-life
POLONIUM-210	2.5×10^6	138.4 days
RADIUM-226	1.3×10^7	1620 years
THORIUM-228	2.0×10^7	1.9 years

Sources of polonium-210 up to 50 curies and radium-226 up to 10 curies are available: supplies of thorium-228 are limited and details of availability will be given on request.

Such sources for reactors must be made to exceptionally high engineering standards. They are supplied in argon-arc welded stainless steel capsules and tested for leakage by helium mass-spectrography. Special sources can be made to withstand operating temperatures up to 800°C.

Please send for further details. Comprehensive catalogues are available on application.

Enquiries for all radioactive supplies and services to:—

THE RADIOCHEMICAL CENTRE

AMERSHAM, BUCKINGHAMSHIRE, ENGLAND

World centre for dependable radiochemicals

Telephone: Little Chalfont 2701
Telex: Active, Amersham 83141
Cables: Activity, Amersham, Telex.

U·K·A·E·A THE RADIOCHEMICAL CENTRE α β° γ

TAS/RC 73

RADIATION MEASURING INSTRUMENTS

FROM

MEILLON

PORTABLE SURVEY METER TYPE #6115

Range from 0 r/h to 500 r/h

Four different ranges: 0–0.5 r/h; 0–3 r/h; 0–50 r/h; 0–500 r/h. Very accurate DEPENDABLE and RUGGED. USES one IONIZATION CHAMBER, and operates with ONE STANDARD (Type D) 1.5 Volt FLASH LIGHT BATTERY. Size: Approx. 9.3" long, 4.7" wide and 5.9" high. Net weight 4.3 lbs.

ALSO: Type 6109-B—built to comply with Military specifications, but with additional DOSE Meter in I r jumps; SOUND (and also Red Light) ALARMS after 100mr dose; and built-in SOURCE.

The PTW "MONITOR"

PTW "MONITOR" SOUND ALARM POCKET DOSIMETER for PERSONAL PROTECTION against radiation from Radium, Isotopes and X-Rays. It is a LIFE SAVER precision instrument for personnel or scientists who may be subjected to high radiation overdoses . . . The "Monitor" can be supplied in capacities of 20 mr., 30 mr., 50 mr., 100 mr., 5 r., etc. It is a small pocket size Dosimeter, weighing only 12½ Ounces, with an overall size of 4½" x 2¾" x 1½". Operates with self-contained RE-CHARGEABLE BATTERIES.

PTW "CONDIOGNOM"

The "Condiognom" is the most advanced fountain-pen Dosimeter, of the INDIRECT Reading type, operated in connection with a Charger-Reader instrument. It has a range from 0–1,000 mr—with TWO DIFFERENT CHAMBERS (0–100 mr & 0–1,000 mr) in one unit. Other features are: ACCURACY ±5%; HIGH RANGE, and practically no leakage (less than 2% of full scale per week) which permits its use for seven and more days WITHOUT RECHARGE. Measurements are practically independent of radiation energy from 50 keV to Gamma rays of Cobalt and Radium.

OTHER PRODUCTS

- POCKET GEIGER COUNTER with range of 0–50 mr/h. Larger ranges also available.
- Special film badge systems for Civil Defense distribution.
- Rate Meters; Scintillation Counters; Floor Monitors.

Wire or Write to

GEORGE T. MEILLON, Inc.
SOLE DISTRIBUTORS
132 NASSAU STREET, NEW YORK 38, N.Y.

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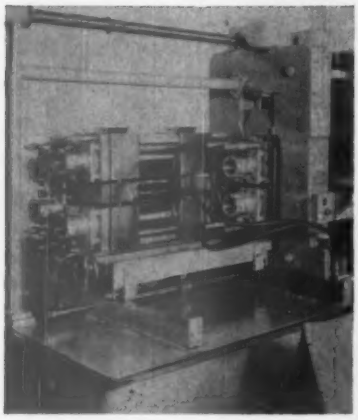
NEWS FROM

LOMA



This heavy-duty, high-precision 2-high/4-high Combination Rolling Mill was recently installed at the new Fuels Technology Center of the Argonne National Laboratory. The outstanding feature of the new machine is its complete enclosure in a controlled atmosphere glovebox to allow the processing of alpha-active, pyrophoric materials, such as plutonium.

To facilitate remote control operation within the glovebox enclosure, the mill is equipped with a mechanized roll changing device comprising a roll storage car, three slideways to carry three roll assemblies, quick-disconnect screwdowns and universal spindle supports. The entire roll assemblies are readily moved into or out of the mill by turning a handwheel and are cross-transferred by moving the car along the face of the mill. Thus, complete roll changes can be performed in a few minutes without undue effort.

The new LOMA rolling mill may be operated in either a 6 in. x 8 in. 2-high set-up or a 1½ in. & 6 in. x 8 in. 4-high set-up. The 2-high arrangement is used for either hot or cold breakdown rolling of plate and sheet, and grooved rolls are also available to process rounds from 1 in. to ¼ in. diameter. In the 4-high set-up strip is cold finish rolled to gauges as thin as .002 in.

The mill is furnished with high-strength steel housings, twin-handwheel wormdrive screwdowns, universal joint spindles, herringbone gearing, and a 15 h.p. reversing variable-speed drive. The roll necks are mounted in super-precision needle roller bearings having a total separating force capacity of 175,000 lb. The bearings are continuously lubricated by an oil circulating system.

Special cartridge heating elements are mounted in the rolls to prevent undue chilling of the materials being hot worked. The heating elements are fed with current through slip rings and brushes mounted at the outboard side of the mill.

LOMA
MACHINE MFG. CO., INC.
114 East 32nd Street
New York 16, N. Y.

COMMUNICATION OF IDEAS

"Ideas must work through the brains and the arms of good and brave men, or they are no better than dreams."— *EMERSON*

Qualified applicants are invited to send resumes to:
Director of Personnel, Division 61-97

los alamos
scientific laboratory
OF THE UNIVERSITY OF CALIFORNIA
LOS ALAMOS, NEW MEXICO

All qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin. U.S. citizenship required.

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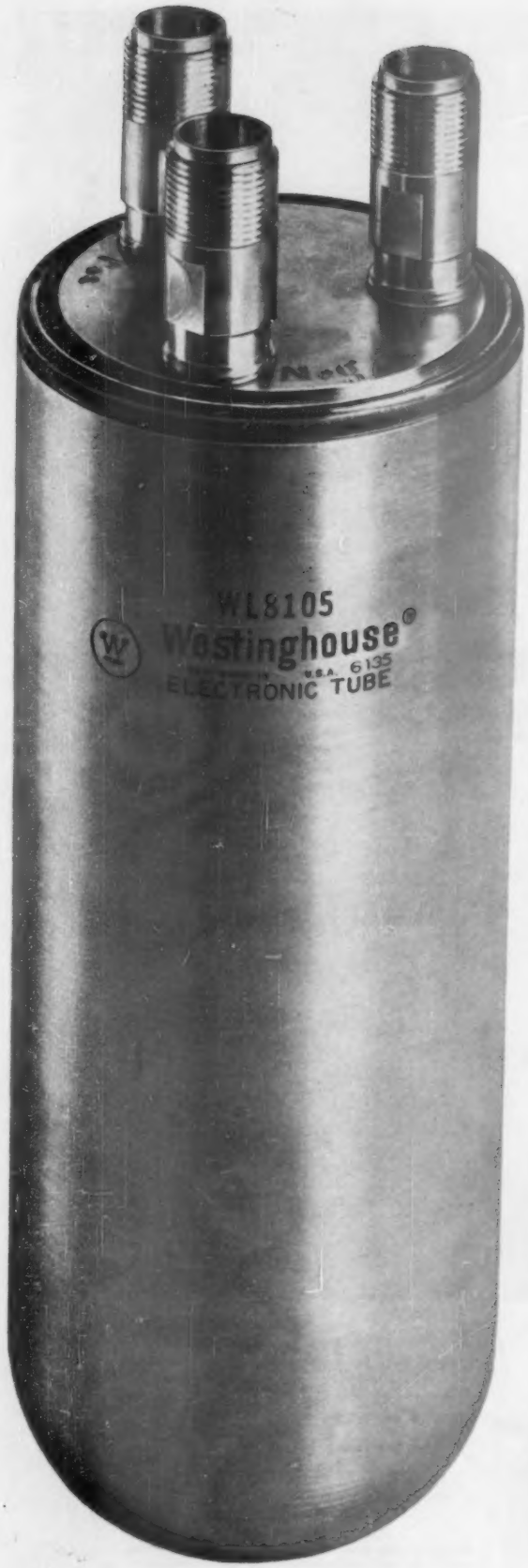

new ECONOLINE neutron detector

a cost-reduced line specifically designed for universities, training reactors, experimental facilities, other land-based applications. Backed by years of Westinghouse experience in supplying industrial and military detectors, this new line offers extremely long life, high reliability and ruggedization.

Typical ECONOLINE detectors: WL-8105 compensated ionization chamber. Outstanding features: * Lowest domestic price—under $800 * Very low noise level * High sensitivity—2 x 10^{-14} amps/neutron/cm²/second * Compensation factor 20:l minimum * High purity aluminum construction—for low activation, easier handling * Operating voltage —800 volts * Standard size—interchangeable.

Other ECONOLINE detectors include an uncompensated ionization chamber and an electrically variable compensated ionization chamber. For further information, call or write: Westinghouse Electric Corporation, P.O. Box 284, Elmira, N. Y. *You can be sure... if it's WESTINGHOUSE.*

See the new ECONOLINE and other neutron detectors—visit the Westinghouse booth #420 at the Atom Fair, Chicago, November 6-10, 1961.

Westinghouse

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When ordering or seeking information, please mention NUCLEONICS BUYERS' GUIDE ISSUE.

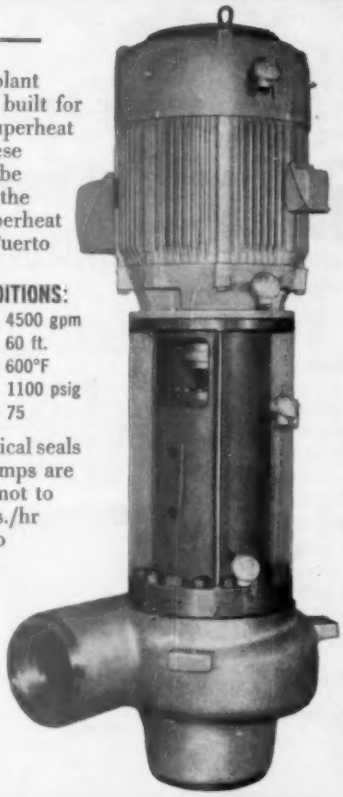
First—

Primary coolant pumps ever built for a nuclear superheat reactor. These pumps will be installed in the BONUS superheat reactor in Puerto Rico.

DESIGN CONDITIONS:

CAPACITY	4500 gpm
HEAD	60 ft.
TEMPERATURE	600°F
PRESSURE	1100 psig
HORSEPOWER	75

The mechanical seals on these pumps are guaranteed not to exceed 2 lbs./hr of leakage to atmosphere.

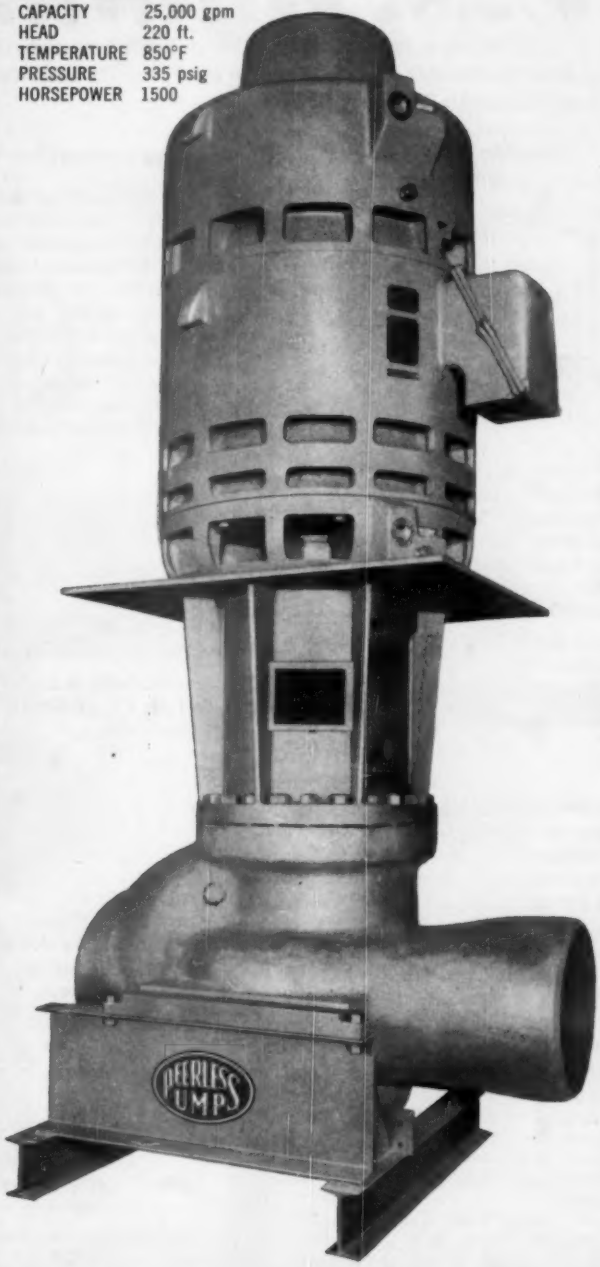


Largest—

Limited leakage primary coolant pump ever built. This 14 foot high mammoth will be installed at the NATIONAL REACTOR TEST STATION near Idaho Falls. This pump will handle an organic moderator. It has bearings specially designed to run in the pumped fluid.

DESIGN CONDITIONS:

CAPACITY	25,000 gpm
HEAD	220 ft.
TEMPERATURE	850°F
PRESSURE	335 psig
HORSEPOWER	1500



WHEN 36 YEARS OF PEERLESS PUMP EXPERIENCE IS PUT TO WORK— YOU GET RESULTS!

Results are what counts. And proven pumps are what you get when you deal with Peerless. Peerless offers you a complete follow-through program on any nuclear pump project. Development, manufacturing, quality control testing, hydraulic and mechanical testing, installation supervision and acceptance testing are among the many services offered. Either components or complete units can be provided.

For your next nuclear pump project, call on Peerless. For descriptive literature, request Bulletin PR-2. Write Peerless Pump, Hydrodynamics Division, FMC Corporation, 240 West Avenue 25, Los Angeles 31, California.

Another First—way back when the first forced circulation dual cycle reactor was built at Vallecitos, Peerless built and supplied this BWR circulation pump designed for 9000 gpm, 60 feet differential head at 544°F. System pressure is 1000 psi. It is just one of many limited leakage pumps built by Peerless.

fmc CORPORATION ®

HYDRODYNAMICS DIVISION

PEERLESS PUMP

Plants: Los Angeles, Calif. • Indianapolis, Ind.

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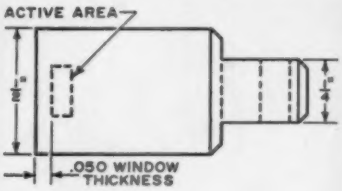
now available from U.S. Radium

U.S. Radium is now stocking quantities of standardized products to satisfy customer requirements, as for example, the items presented below. It is our intent to add to this list as the demand warrants.

doubly encapsulated gamma sources



Cs^{137} sources: 50, 100, 150, 200, 300, 500, 750 and 1000 mc ± 20 per cent. Available from stock in Monel housings. Supplied with 416 stainless steel eyeletted handling lug for magnetic manipulation, as illustrated, or without lug.

Delivery after AEC license approval and AEC-required seven-day leak test.

Special designs, sizes and encapsulating materials to order.

tritium foils and targets

Titanium tritide foil is a prime source of low energy beta particles for applications in gas chromatography, or, when bombarded by accelerated deuterons or protons, produces copious supplies of neutrons for activation analysis, oil well logging and related applications.

Targets available from stock with two types of backing—type 302 stainless steel (0.002-in. thick) and OFHC copper (0.010-in. thick). Standard tritium content is nominal 1 curie/in.^{2} (0.16 curies/cm^2). Targets supplied in sheared square or rectangular configurations. Also in circular form; stock die measurements as follows:

Diameter (in.)	0.207	0.245	0.312	0.359	0.430
(mm.)	5.25	6.22	7.92	9.12	11.42
Diameter (in.)	0.775	1.125	1.187	1.25	2.25
(mm.)	19.68	28.57	30.15	31.75	57.15

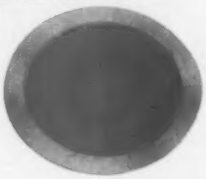
Immediate delivery following AEC license approval.

Other concentrations and custom targets on special order. Request bulletin 20.70.

geiger-mueller tubes

A wide variety of highest quality—economically priced G-M tubes are in stock—produced for U.S. Radium for exclusive sale in the United States by Electronic Associates Limited of Canada. Of particular interest is type EA-3EW, a 1⅛-in. diameter end window, organic-quenched tube with standard four prong base; operating at about 1200—1250V, greater than 350V plateau, average 3 per cent/100V slope and a life of over 500,000,000 counts. Additional G-M tubes described in data sheet available on request.

uranium oxide alpha calibration sources



Uranium oxide uniformly, quantitatively deposited on stainless steel discs and protected by an acrylic lacquer against mild abrasion, is available from stock.

	302 SS, 0.032-in. Thick Discs	
	2⅝-in. Diameter	1-in. Diameter
Active Diameter	2 in.	⅞ in.
Activity (± 20%)*	1,000 cpm	1,000 cpm
	10,000	5,000
	25,000	

*Counted in internal proportional counter.

No AEC license required.

Special sizes fabricated to order,

Request bulletin 20.80.

US RADIUM

united states radium corporation

MORRISTOWN, N. J. | Offices: Chicago, Illinois and North Hollywood, Calif. Subsidiaries: Radelin Ltd., Port Credit, Ont., Canada and U.S. Radium Corp. (Europe), Geneva, Switzerland.

SA

For Accurate Rod Position Monitoring

Scientific-Atlanta position indicator and synchro transmitter units are well suited to remote rod position monitoring applications. Three basic units are available. Series IU Position Indicator Units, Series PX 1 Synchro Transmitter Units, and Series SIA Synchro Isolation Amplifiers.

MODEL IU 6 DUAL SYNCHRO

Series IU Positioner Indicator Units give accurate remote indication of linear or angular position. Two basic types are offered, single synchro models driving single or dual pointers and non-ambiguous dual synchro models driving dual pointers. Features include instant visual monitoring, accuracy to ±0.03 degrees in dual synchro and 36:1 geared models, direct operation from Scientific-Atlanta Series PX 1 Synchro Transmitter Units and availaility of special scales or synchro ratios.

MODEL PX 1-X5

Series PX 1 Synchro Transmitter Units supply linear and angular position information to accuracies of .01% which in turn drives indicator and other synchro or servo control devices. Features include a wide selection of input devices, resistance to adverse environment, small size, precision AGMA Class 1 gears, and precision size 23 synchros.

SIA Isolation Amplifiers can be used to drive up to 6 indicators over long distances.

See your Scientific-Atlanta engineering representative for more information or write to . . .

SCIENTIFIC-ATLANTA, INC.

2162 Piedmont Road, N.E.
ATLANTA, GEORGIA
Phone: 875-7291

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the ultimate in modular design

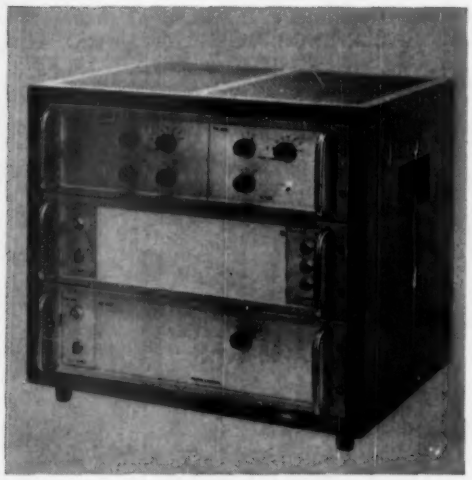
The new conception of measuring techniques requires the utmost simplicity in equipment operation. The user should be able to fully concentrate on the measuring results.

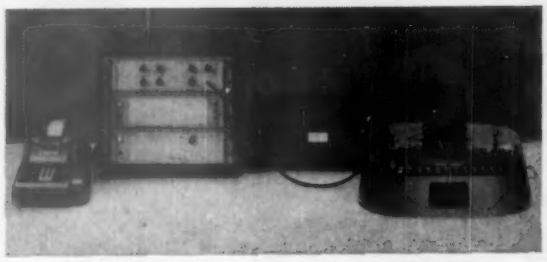
This leads to a maximum of automation of measuring systems which finds its ultimate realisation in the conception of the latest modular units of the Philips programme for measurement and detection of radio active radiation.

The new transistorized modules have been so designed that fully automatic operation with other equipment as sample changers, accelerators etc., is obtained. Starting-, stopping-, and resetting pulses originating from other modules are accepted whereas each module itself produces such pulses to govern the functioning of other units for parallel or coherent operation. Various ways for the sequencing of operations are obtained by interconnections of the socket terminals provided on each unit for this specific purpose.

The integrated counter-timer-printer presented here is intended for fully automatic operation of measuring systems which have to cope with large quantities of radio active samples.

- The **preset counter** for counting rates of up to 1 Mc/s incorporates 7 decades
- The 8-decade crystal controlled electronic **timer** provides 30 preset time settings
- The **printer control unit** reads out the counter and the timer registers and translates the information thus obtained into standard pulses to operate commercial printers, tape- or card punch machines or other data handling apparatus to record sample information for machine analysis.





The new Philips nuclear modules - the offspring of the modular units already introduced in 1955 - present the economic and technical answer to any requirement ranging from simple counting instruments to fully automatic multi-scaling arrangements.

PHILIPS NUCLEAR EQUIPMENT

N.V. PHILIPS' GLOEILAMPENFABRIEKEN - EINDHOVEN - THE NETHERLANDS - SCIENTIFIC EQUIPMENT DEPARTMENT

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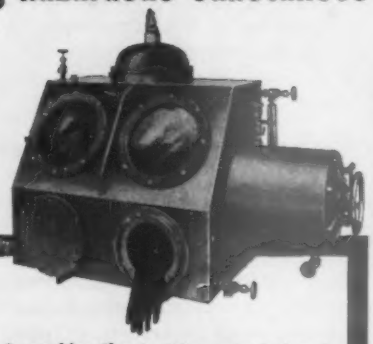
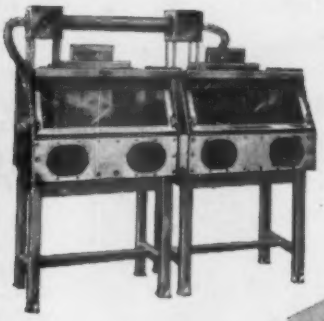
22 types of SAFETY ENCLOSURES for handling hazardous substances

VACUUM DRY BOX

for work in controlled atmosphere • sloping front • round autoclave-type air lock.

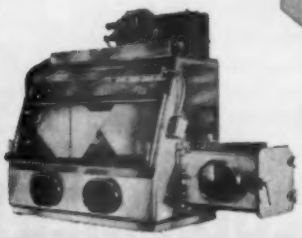


Safety is the first consideration in this newly-designed stainless steel laboratory equipment. These enclosures make it safer—and easier—for the technician to work with contaminants, micro-organisms, live viruses, infected animals, poisonous and radioactive substances. Stainless steel constructed with crevice-free surfaces, generously rounded corners, for easy cleaning and decontamination. Write for illustrated folder describing 22 different kinds of enclosures. S. BLICKMAN, INC., 7911 GREGORY AVENUE, WEEHAWKEN, N. J.



UNITIZED ENCLOSURES
Low in cost • Stainless steel • Modular construction adapts to many uses.

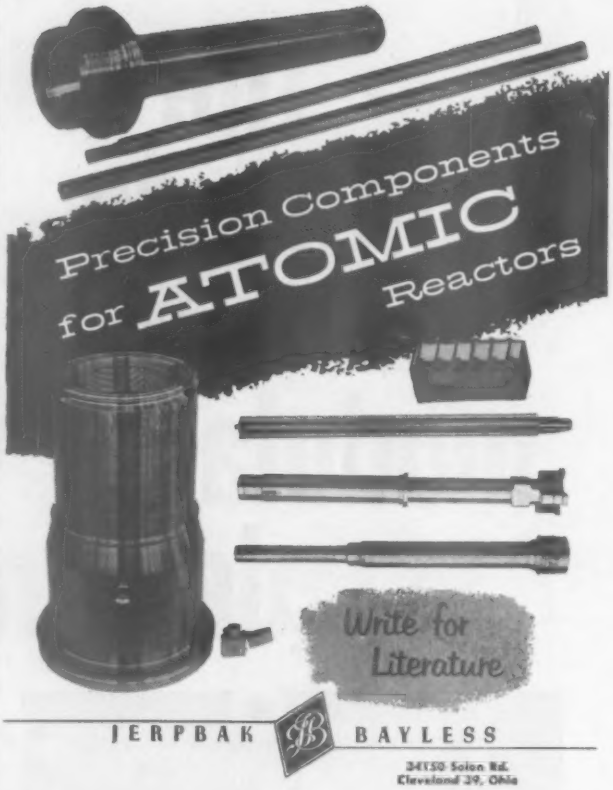
CALIFORNIA-TYPE FUME HOOD
For handling radioactive materials • dual-sided for double operation.



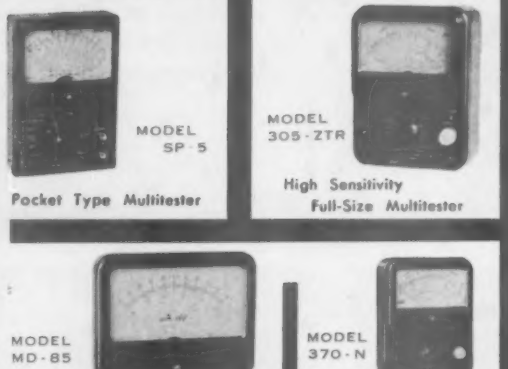
MICRO-BIOLOGICAL SAFETY CABINET
Back or top mounting of biological filter canister • air lock if wanted.

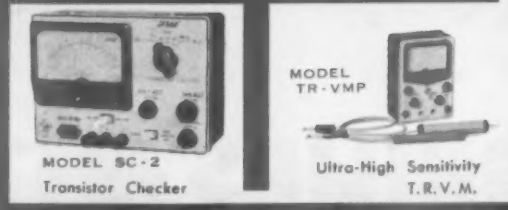
BLICKMAN SAFETY ENCLOSURES

Look for this symbol of quality



JERPBAK BAYLESS
24150 Solon Rd.
Cleveland 39, Ohio





SANWA ELECTRIC INSTRUMENT WORKS, LTD.

SANWA

1077 Koigakubo, Kokubunji-machi
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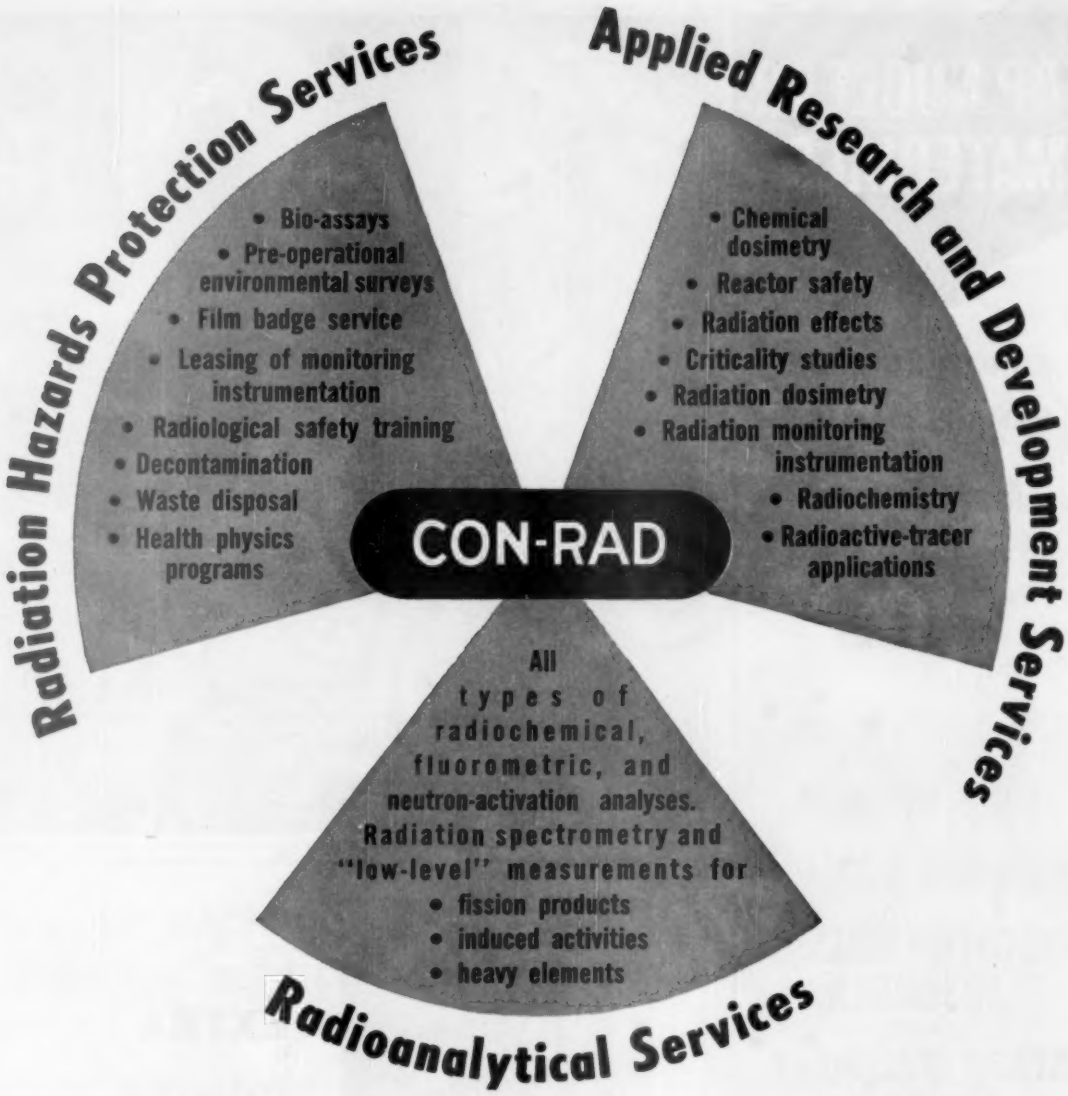

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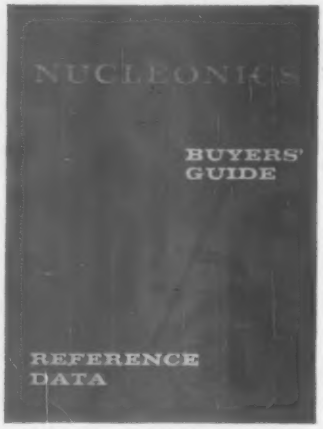

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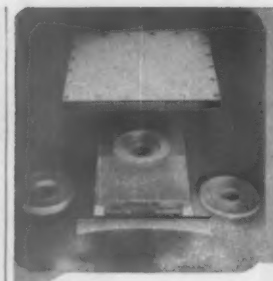

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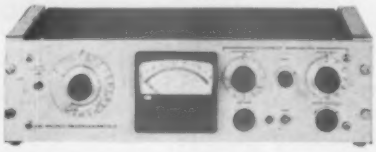

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415	10^{-3}, 3×10^{-4}, 10^{-4} etc. to 10^{-12} amp f.s.	±2% f.s. 10^{-3} thru 10^{-8} ranges; ±3% f.s. 3×10^{-8} thru 10^{-12}.	After warmup, below 2% f.s. per 24 hours all ranges.	1 v f.s. up to 5 ma. Output noise below 20 mv rms.
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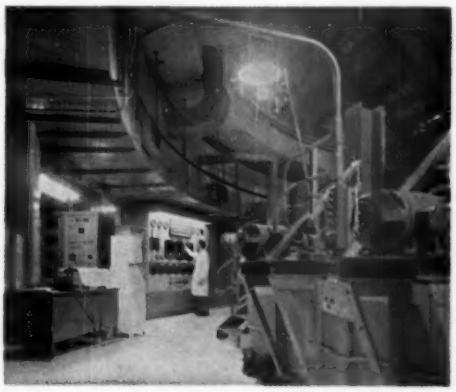

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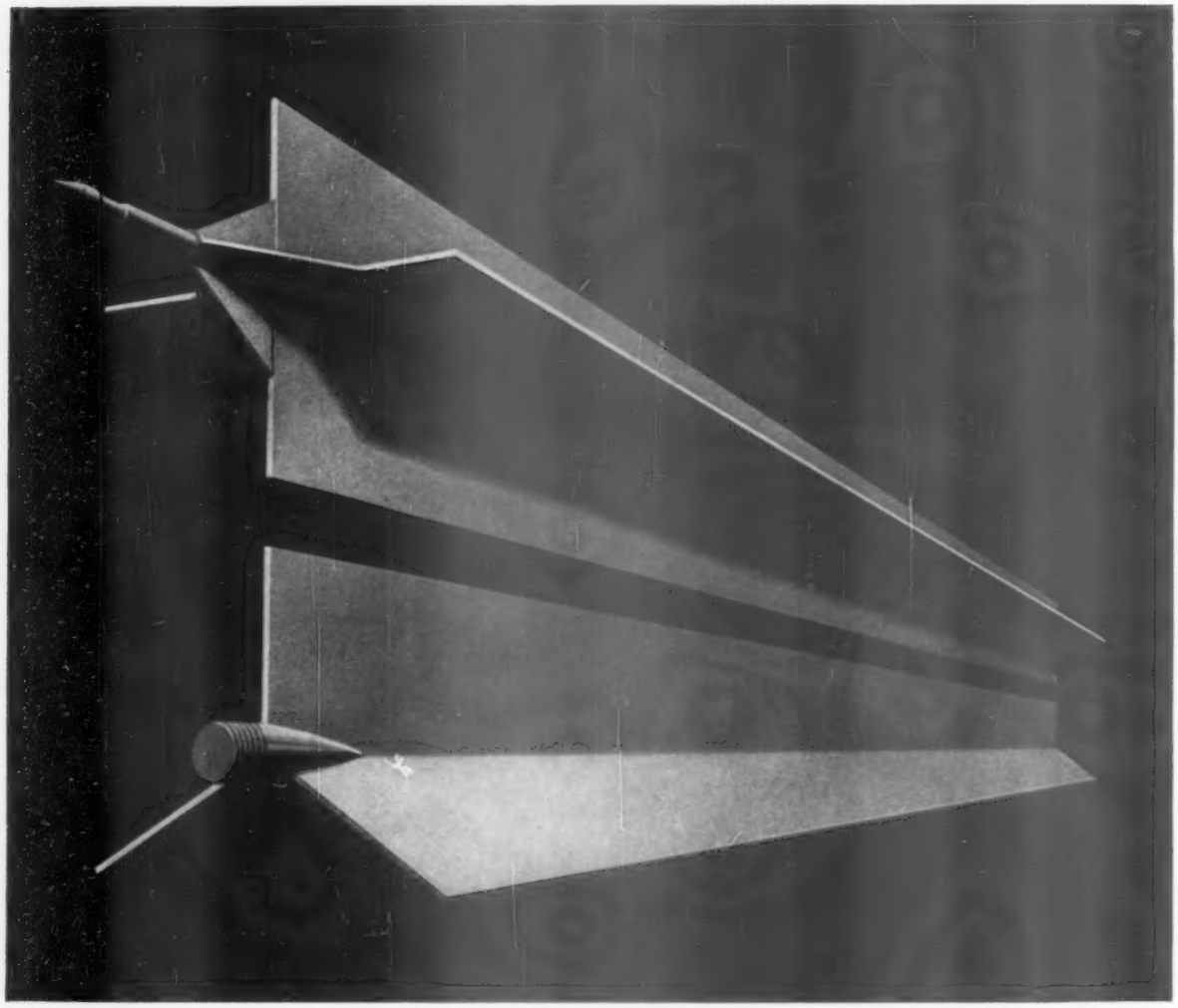

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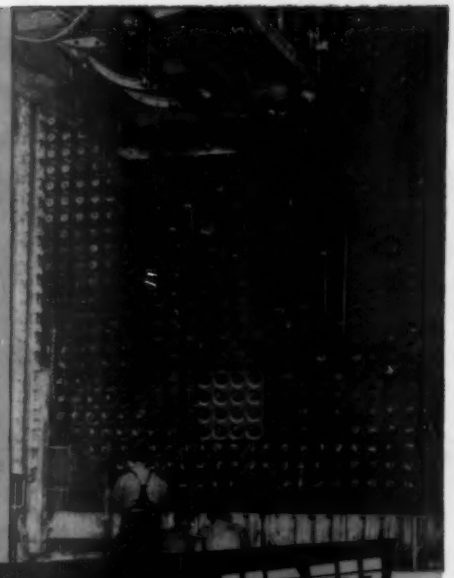

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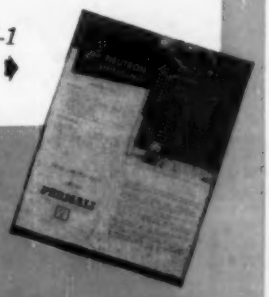

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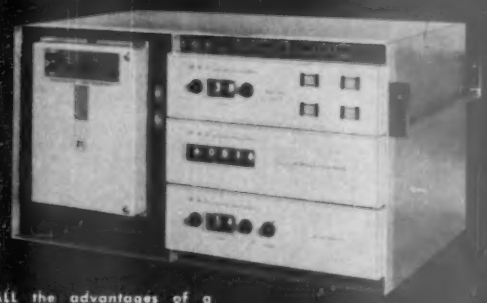

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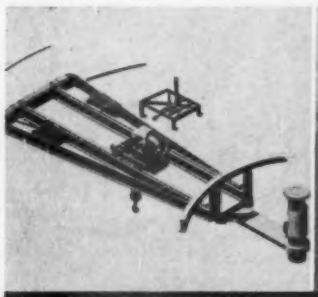
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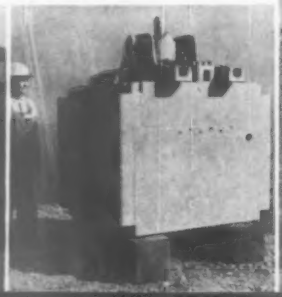
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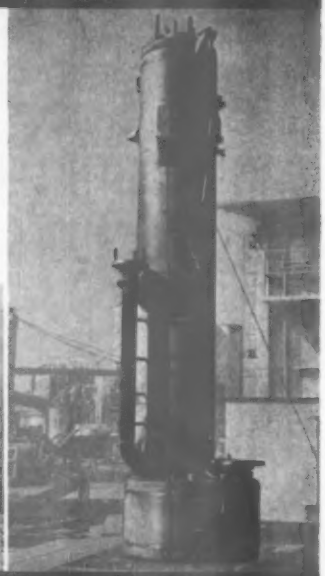
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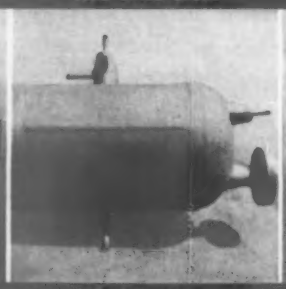
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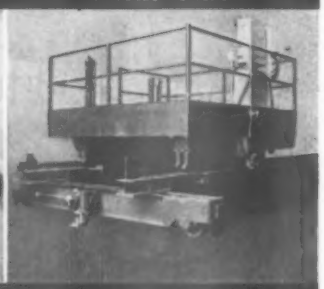
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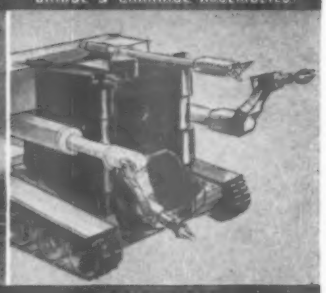
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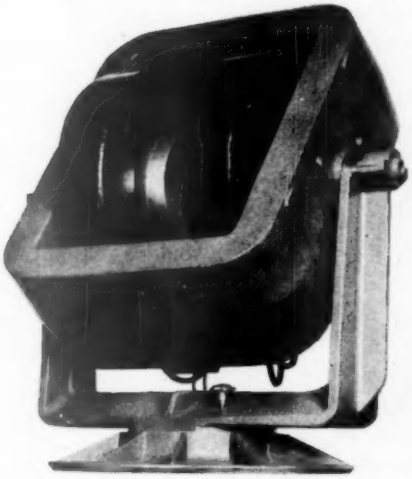

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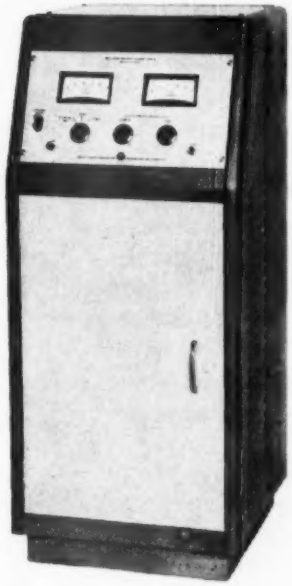

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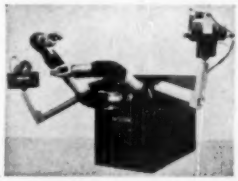

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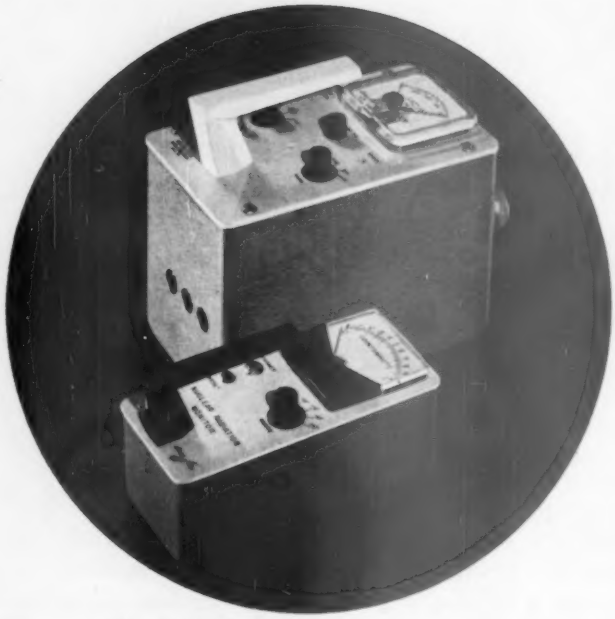

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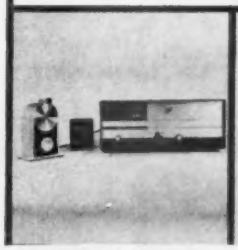

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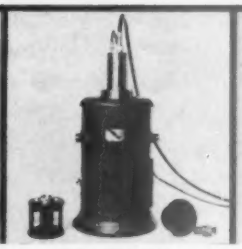

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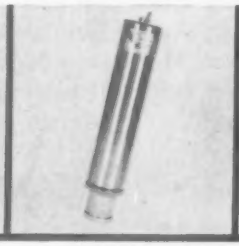

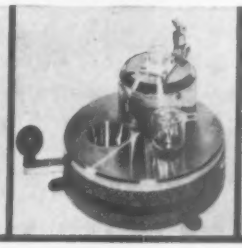

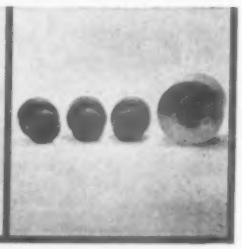

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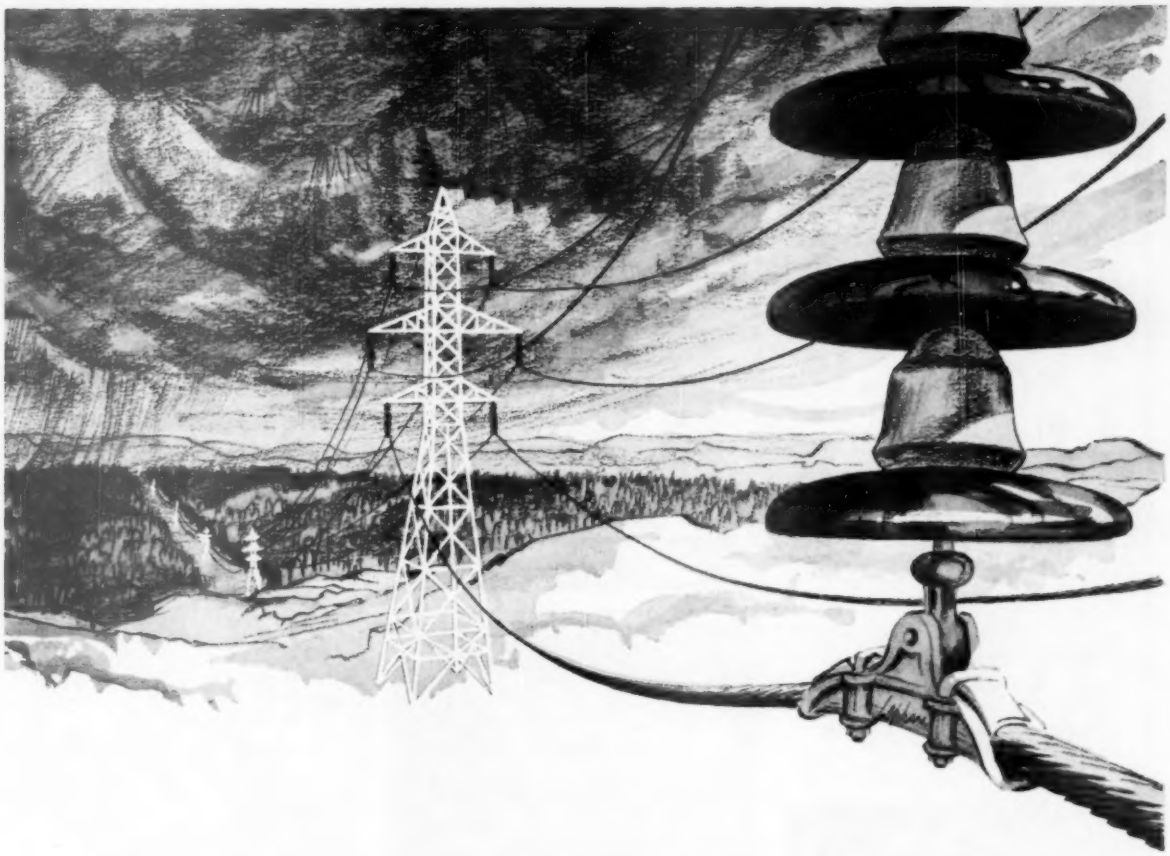

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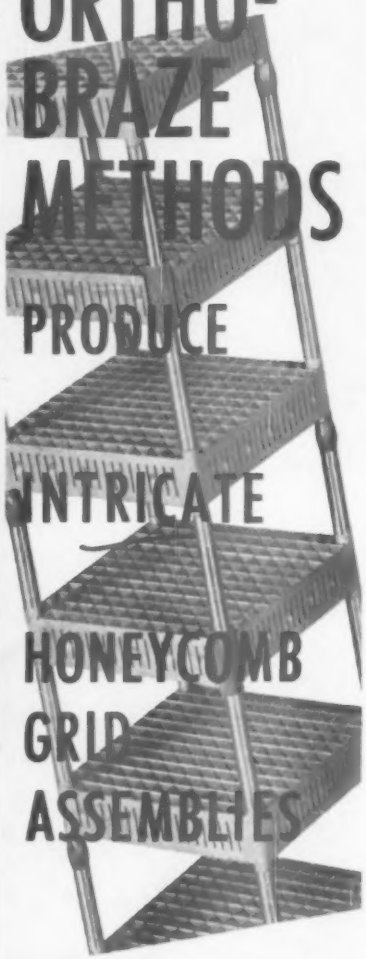

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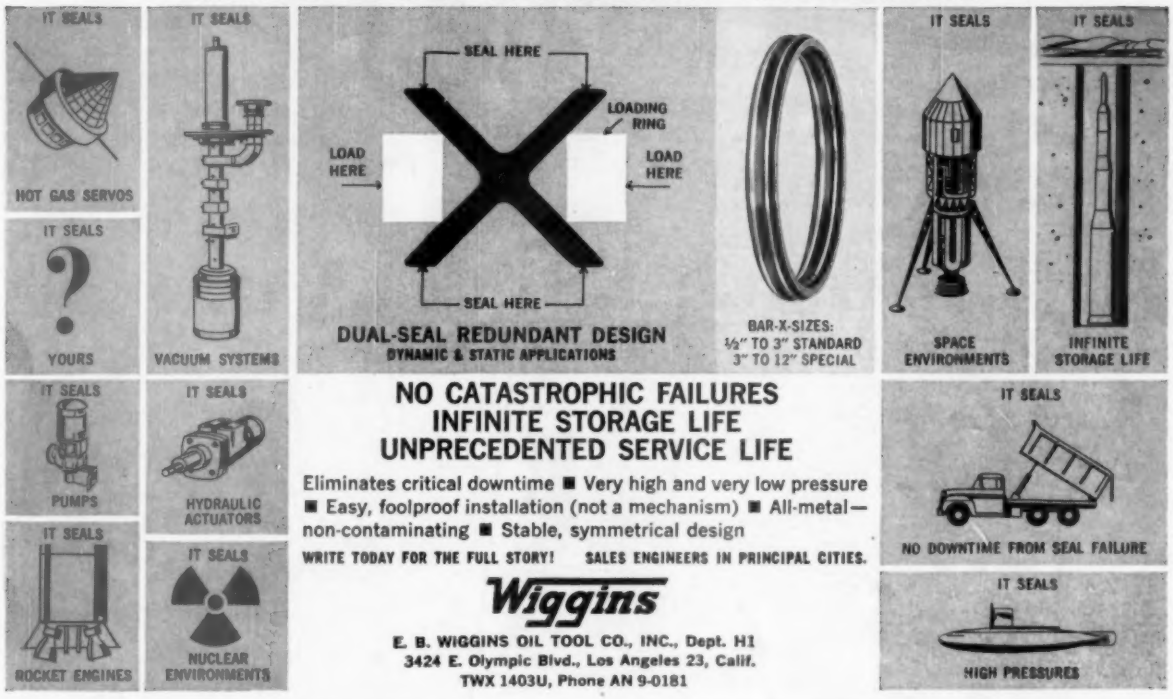

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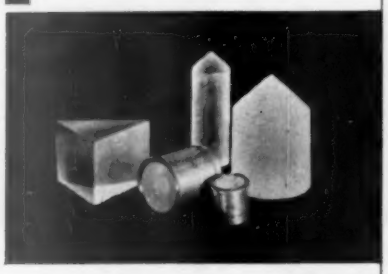

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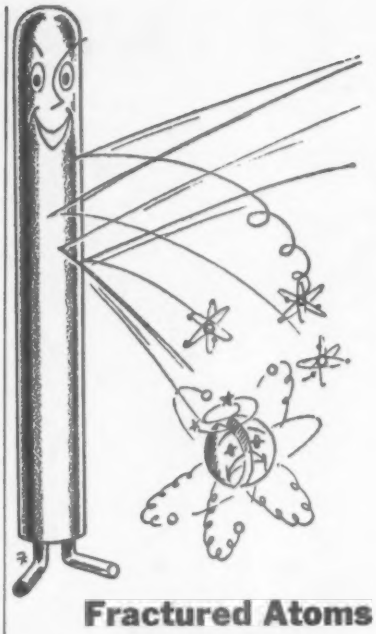

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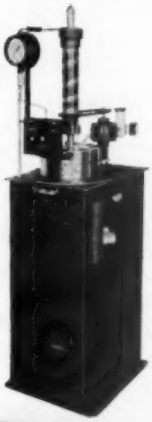

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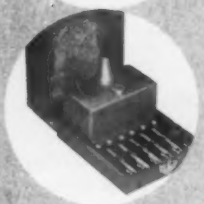

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NPSG SERIES — The NPSG Series of nuclear particle detectors is an improved version of the NPS p-n junction detector. A unique guard ring construction results in a low noise and very reliable unit. Noise generated by surface current at the edge of the silicon wafer is by-passed without affecting the sensitivity of the inner portion. The guard ring detector retains the high performance characteristics of the NPS Series, having millimicrosecond response and a negligible entrance window. High energy resolutions are obtainable because of the elimination of noise due to surface current.

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The SSR Model 103 Low Noise Vacuum Tube Preamplifier was designed specifically for use with semiconductor nuclear particle detectors. A cascode type input stage with a charge sensitive feedback configuration obtains low noise performance and minimizes the effect of variations in detector capacitance on the output pulse height. The printed circuit layout and shock mounted tubes are entirely enclosed in an aluminum case to eliminate pickup and microphonics.

A specially designed low noise power supply, SSR Model 201, is available for use with the SSR Model 103 preamplifier. It features very low ripple and an integral, highly regulated d-c filament supply.

The SSR Model 301 Vacuum Spectrometry Chamber makes it possible to perform alpha and beta spectroscopy and counting without the use of complicated apparatus, purge gas, and special sample preparation. The stainless steel chamber has a negligible background count and is readily decontaminated. Using the NPSG detector and matched low noise hard tube preamplifier, sample analysis time is reduced to a few minutes. The output of the direct-mounted charge sensitive preamplifier can feed directly into a multi-channel analyzer or through a linear amplifier to scaling or counting apparatus.

VACUUM SPECTROMETRY CHAMBER

UNIVERSAL PREAMPLIFIER

The SSR Model 101 Universal Preamplifier is a fully transistorized charge sensitive preamplifier for use with semiconductor nuclear particle detectors. It has very low noise characteristics, below 50 Kev FWHM, with very fast time constants. It may be operated either as a charge sensitive or voltage type unit. The printed circuit assembly is enclosed in a small, rectangular hard chrome case, specially designed for the SSR detectors to be inserted with their sensitive area exposed. These preamplifiers may be stacked for one or two dimensional arrays.

SEMICONDUCTOR EPITHERMAL NEUTRON SPECTROMETER

The SSR Semiconductor Epithermal Neutron Spectrometer is a completely new transistorized system incorporating many features never before available for neutron spectroscopy. The sensing element is a hermetically sealed package consisting of a sandwich of Li^6 metal between two guard ring detectors. The sum of the pulses produced by the alpha and triton from the $Li^6(n,\alpha)H^3$ reaction yields output pulses which are linear with neutron energy from 0.3 to 15 Mev.

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F) Coincidence gate pulse goes directly to the analyzer, without interfering with the spectrometer signal.
G) Transistorized biased post amplifier with variable input time constants for minimizing noise is available and may be incorporated as an optional feature.

Solid State Radiations is developing a very deep depletion depth lithium drift detector for high energy particle spectroscopy and gamma detection. These units are available on an experimental basis. SSR also makes an all solid-state Gamma Mini-ratemeter for instrument evaluation purposes. Also, a solid-state biased post amplifier with variable input time constants for minimizing noise is available for use with semiconductor nuclear particle detectors. Miniature probes for medical and reactor neutron survey work may be ordered on special contract.

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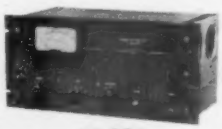

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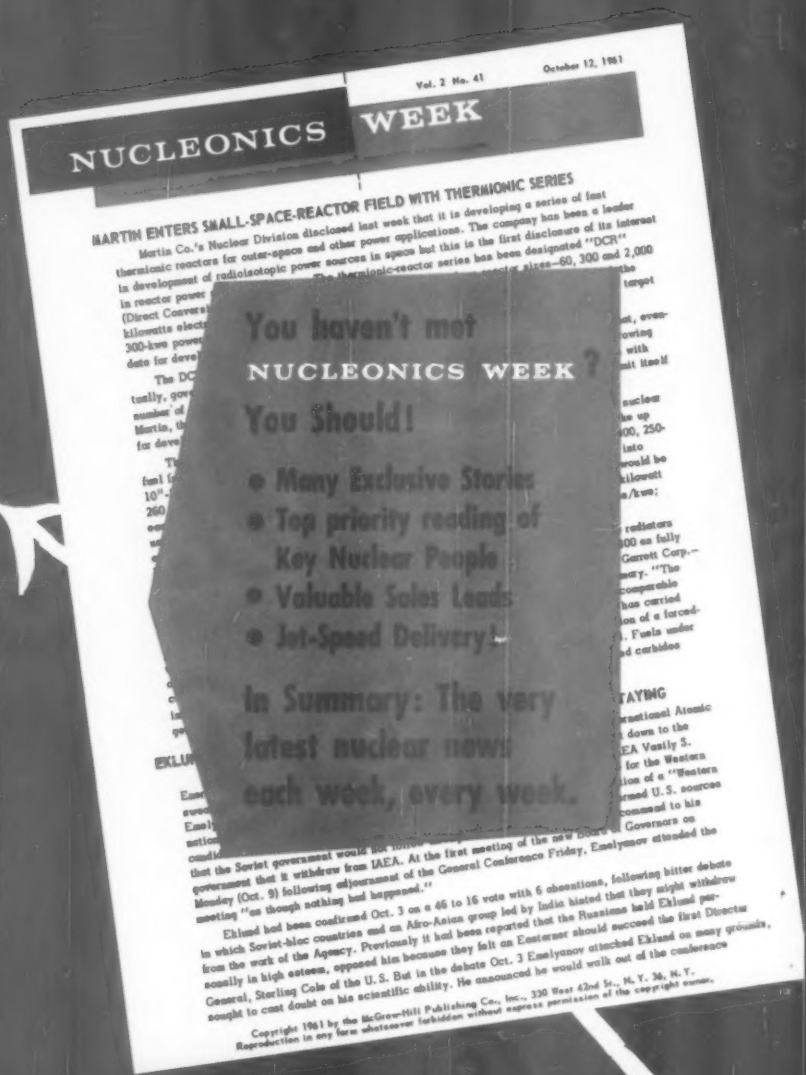
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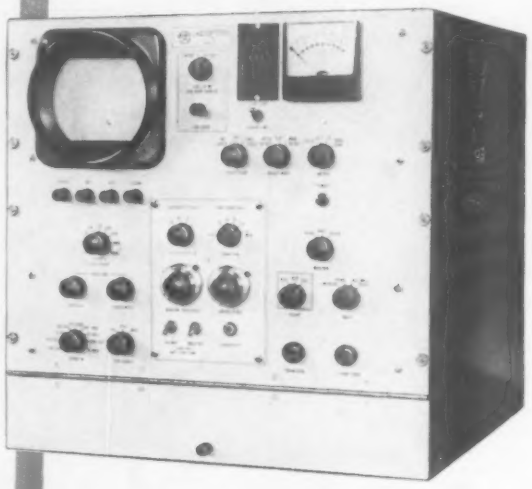

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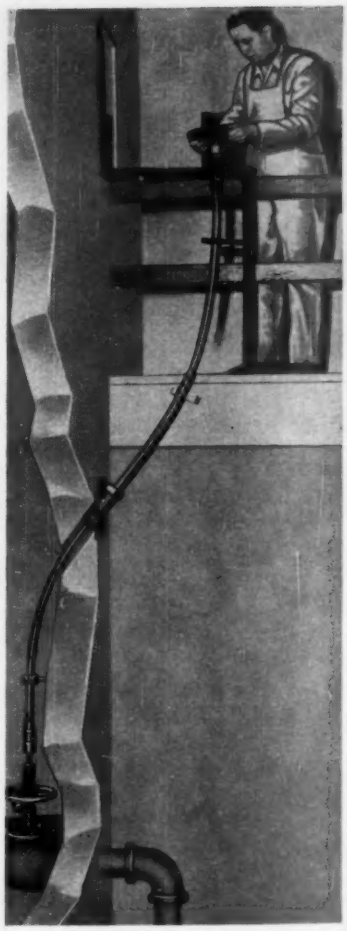

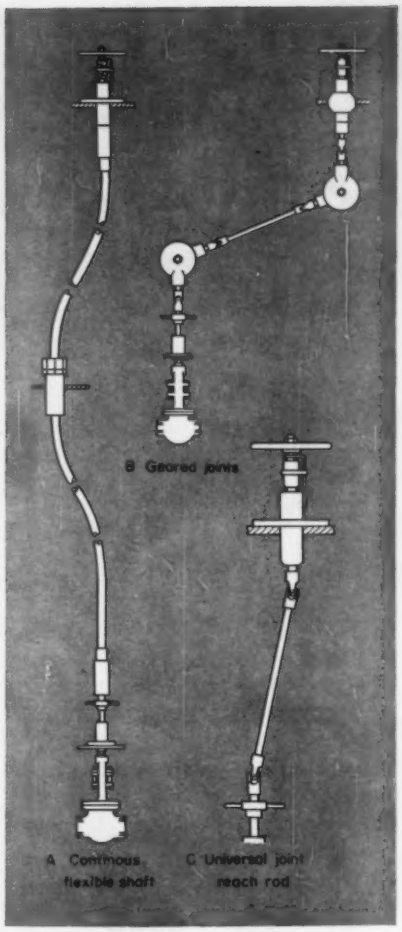

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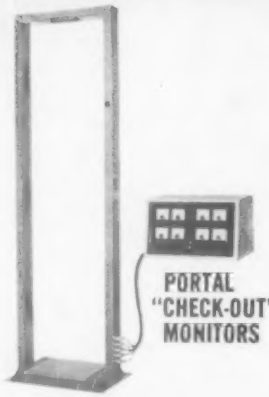

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special hi-integrity welds

MOBILITY & FLEXIBILITY

low gamma radiation
less shield, weight, space
wider range of application

LOWER COSTS

Total costs for either purchase or rental use of NUMEC Pu:Be neutron sources less than rental price of comparable Ra:Be sources.
Ease of calibration due to constant neutron emission – savings in time and money.

NUMEC standard Pu:Be sources include 1, 2, 3, 4, 5, 7 and 10 curie sizes.

ALPHA, BETA, GAMMA, and other NEUTRON sources also available.

NUMEC®

NUCLEAR MATERIALS AND EQUIPMENT CORPORATION
APOLLO, PA. PHONE GR 2-9411
TWX APO 276 CABLE NUMEC

Ekco Electronics Announce new ratemeter N600B with improved stability and versatility

The N600B has been designed for stable high-resolution analysing with the new type low-noise scintillation tubes, combining in one unit:—

* Precision Ratemeter, temperature compensated, accuracy higher than 1%.
* H.V. 200-2500 volts with a stability of .025% for a line change from 105 to 115 volts.
* Non-overloading amplifier designed for all forms of scintillation counting.
* Motorised pulse-height analyser with continuously variable gates and a unique % channel facility.
* Outputs for scaler, recorder, oscilloscope. Power Pack monitoring points.
* External pre-amplifier is available for proportional counting applications.

For complete information, write

EKCO *Electronics Ltd.*
SOUTHEND-ON-SEA · ENGLAND

In U.S.A. contact associate company
American Tradair Corporation, 34-01 30th Street
Long Island City 6, NEW YORK

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NUMEC HAS THE CAPABILITY & EXPERIENCE TO HANDLE YOUR REQUIREMENTS FOR THE

REPROCESSING AND RECOVERY OF SCRAP

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NUMEC's fully integrated facilities are available for the recovery and reprocessing of your unirradiated scrap materials. All process and laboratory uranium scrap materials, including fully enriched, will be accepted. Materials may be in metallic, ceramic or solution form, clad or unclad.

NUMEC is the primary commercial firm in the scrap recovery field. Experience includes recovery work with such materials as uranium metal, oxides, dispersions, and alloys; urania-thoria mixtures and solid solutions; urania-zirconia solid solutions; urania-beryllia and many others.

New facilities for the recovery and reprocessing of plutonium bearing scrap materials will be in operation soon.

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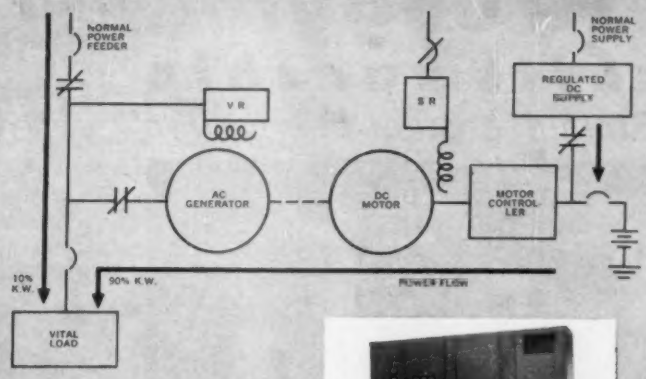

The rating of the AC generator for this Kearfott system is 40 KW, 3 phase, 60 cycle, 460 volts.

CONTINUOUS UNVARYING POWER FOR VITAL INSTRUMENTATION IN CHEMICAL PROCESSING

A TYPICAL APPLICATION OF KEARFOTT UNINTERRUPTED POWER SYSTEMS

In chemical processes where even a split-second interruption of computers and related instruments can cause heavy losses, protection against power failure pays high dividends on a relatively modest investment. Take, for example, the Kearfott system pictured here, which assures surge-free entrance of emergency power in zero time in case the normal input varies or fails.

In normal operation, the DC motor runs continuously on power from the static supply, which also keeps the batteries fully charged at all times. The AC generator operates in parallel with the main power and furnishes about 90% of the vital load requirement.

If the main power fails, the DC motor continues to run, drawing its current from the batteries. Simultaneously, the AC generator assumes 100% of the vital load. When main power is restored, the system automatically reverts to normal operation.

Kearfott systems are available with generator ratings to 150 KVA 60 and 400 cycles, single and polyphase, and provide frequency, voltage and transfer regulation as required by the application.

Write for complete data

KEARFOTT DIVISION
GENERAL PRECISION, INC.

Little Falls, New Jersey

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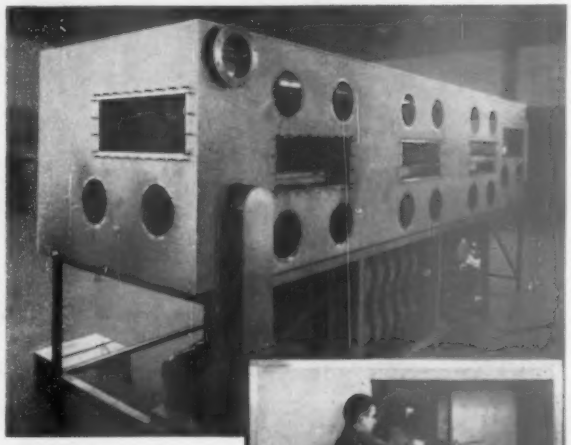
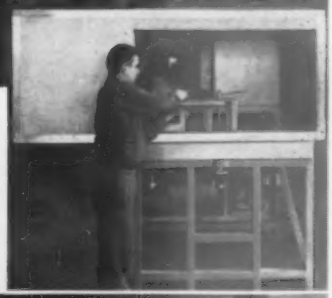
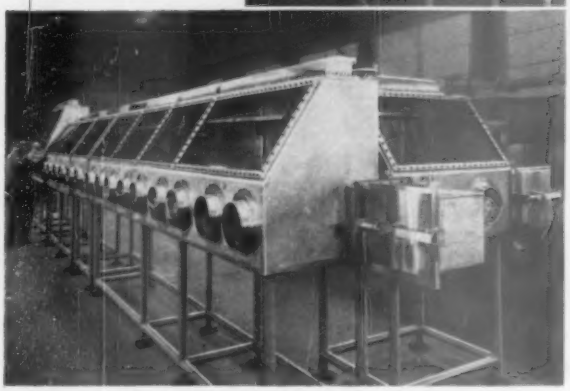
Krueger
Craftsmanship
In Stainless Steel Fabrication





Low temperature hood, complete with refrigeration, hydraulic and electrical systems.

End view of the above hood showing refrigeration cubicles and conveyor system.



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UTTERLY SIMPLE

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A **sleeve**, raised and lowered within a nonmagnetic tube as liquid level or flow rates change, attracts or releases a permanent magnet attached to a **mercury switch** outside the tube. That's all there is to it.

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Magnetrols are available for controlling liquid level changes from ¼" to 150' and more with single or multi-stage switching; flow switches to signal start, stop or insufficient flow within fractions of gpm rates.

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☐ Liquid Level Controls ☐ Flow Controls

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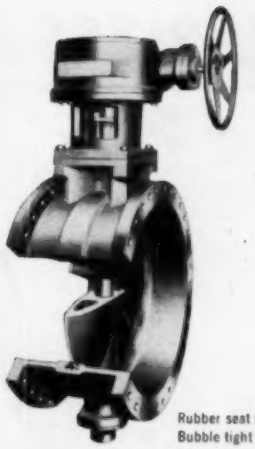

Rubber seat butterfly valves. Bubble tight to 125 psi.

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- **Reversing valves (for condenser water circulation)**

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Expansion joints
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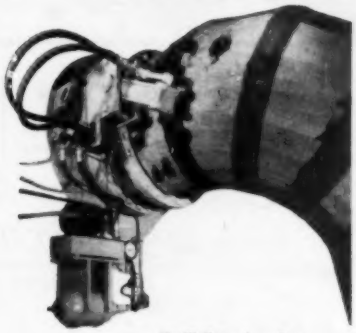

Ventilating valves close in ⅕ second or less

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Lemont, Ill. (Argonne) (EBWR)

Vallecitos Boiling Water Reactor
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NRTS, Idaho (Argonne) (EBR-2)

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Saxton Nuclear Experimental
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Plum Brook Reactor Facility—NASA

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Boiling Reactor Nuclear Superheat Proj.
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Worcester Polytechnic Institute

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Georgia Tech Reactor

Personnel lock contains incident forces without leakage

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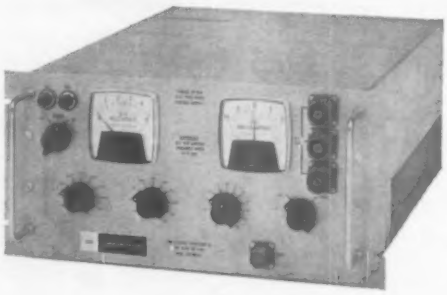
significantly superior

High Voltage Precision Power Supplies



■High performance, low ripple■Precision, dialable output voltage■Ultra-flat regulation, high stability

Here's a power supply engineered not to price, but to *performance*. Compare the data below with that of a conventional supply; we think you'll agree the Carad precision power supply offers custom quality specifications at off-the-shelf prices.

This unusually stable, well-regulated supply was originally developed for a large atomic energy laboratory, for photomultiplier and ionization chamber applications. Its advanced performance characteristics are a direct result of Carad's considerable experience in the sophisticated design of high voltage components, and a working familiarity with the needs of most high voltage applications.

CAT. NO.	DC OUTPUT VOLTAGE RANGE	OUTPUT CURRENT RANGE	REGULATION LINE	REGULATION LOAD	STABILITY PER HOUR	MAX. RMS RIPPLE	PRICE
1514	500-5060 V. and 1.02 V. fixed.*	0-10 ma 0 ma	±.001%	20 mv + 0.001%	0.005%	1 mv	$595
1515	500-5060 V.	0-10 ma	±.001%	20 mv + 0.001%	0.005%	1 mv	$580

Write for additional details on Carad high voltage precision power supplies, programmable power supplies, pulse transformers, and related equipment.

*Fixed 1.02 volt output is for purpose of monitoring output voltage constancy with a standard potentiometer or potentiometric voltmeter.

CARAD CORPORATION
HIGH ENERGY ENGINEERING
Stanford Industrial Park • Palo Alto, California

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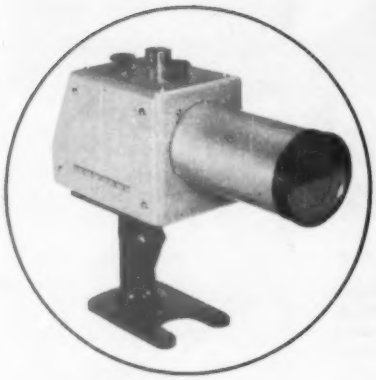
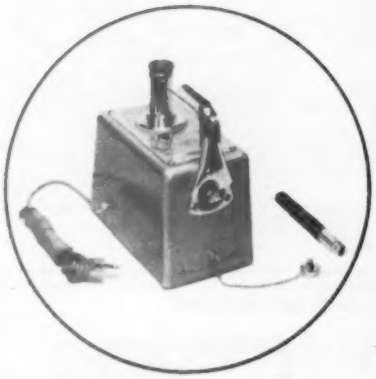
Toshiba



256-CHANNEL
PULSE-HEIGHT ANALYZER



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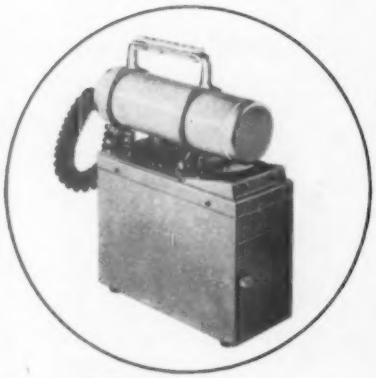

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JAPAN'S FOREMOST MAKER OF NUCLEAR EQUIPMENT

As one of the largest and most advanced electrical equipment manufacturing concerns in Japan today, Toshiba is capitalized at US$128 million. With over 85 years' experience in the electrical equipment manufacturing field, its staff of 56,000 scientists, engineers, technicians and other employees operate 21 industrial plants, the Central Research Laboratory, and six manufacturing divisions. These divisions include: Heavy Apparatus, Lamp and Tube, Telecommunications and Electronics, Electrical Appliances, Automation and Instrumentation, and Turbine.

Toshiba was the first company in Japan to inaugurate the production of radioactive isotopes and atomic industrialization by establishing the Toshiba Radiation Research Laboratory, the largest and best-equipped of its kind in Asia. Later, it spearheaded the forming of the Japan Atomic Industry Group Company, Ltd. Toshiba is now engaged in the research of nuclear fuel, boiling water reactor and nuclear fusion. Its products in the nuclear equipment field include:

Synchrotrons
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Mass Separators
Reactors
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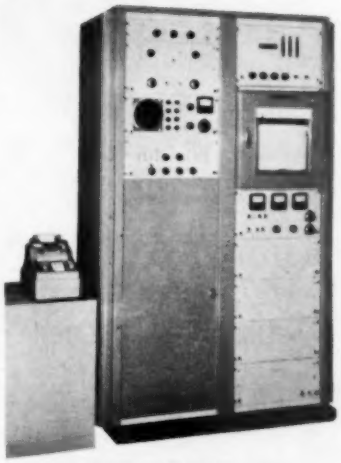
For detailed information on the above products, write

POCKET CHAMBER
& CHARGER READER



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SURVEY METER

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TOKYO SHIBAURA ELECTRIC CO., LTD.

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• Patent Nos. 2,871,450 and 2,967,278

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WITHOUT ELECTRICAL CONTACTS provides continuous output signal past selected control setting, with uninterrupted, accurate full-scale indication at all times. No electrical contacts at control point, so no control-point problems. No undesirable feedback because indicating and transistorized switching circuits are completely isolated. No pull-in or locking coils or special power supplies required. Available in two standard models with single or double independent control-arm circuits. Both may be had with scales for horizontal or vertical mounting, with zero at center, left or right.

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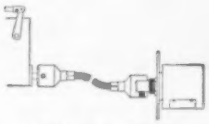
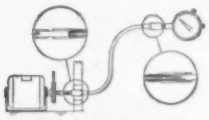
*** All Circle Ess Flexible Shaft Combinations Available with Mono-Directional or Bi-Directional Cable**



Circle Ess Standard used with Servo Motor

Circle Ess Standard used with Variable Speed Motor



Circle Ess Standard used with Hand Held Tachometer

Plus

A Complete Line of Small Angle Drives

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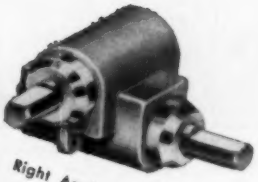

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Low-cost resistance heated standard furnace for growing single crystals of silicon, germanium, and intermetallic compounds under inert gas or vacuum. Minimum maintenance. Top reliability.

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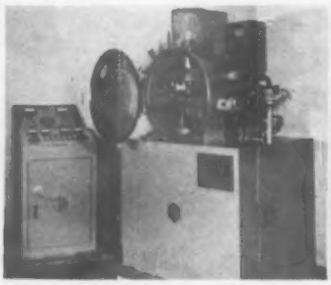
Model 2915 is a high capacity, packaged. internal element furnace, featuring long-lived, 3 phase, 6" ID x 10" element — high speed heating and evacuation to 4400°F and 10^{-5} mm Hg. — graphic panel — automatic protective devices. Larger and smaller units also available.



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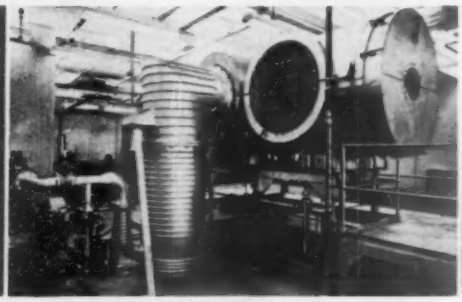
Provides contamination-free, precision welding with minimum heat-affected zone and depth width ratios to 4/1. Ideal for heat sensitive assemblies, evacuated units, and reactive and refractory metals.



SPACE CHAMBERS

Standard and special systems to simulate the pressures and temperatures found at altitudes to above 400 miles. Available in sizes from 12" to 84" I.D., pressures to 10^{-10} mm Hg.

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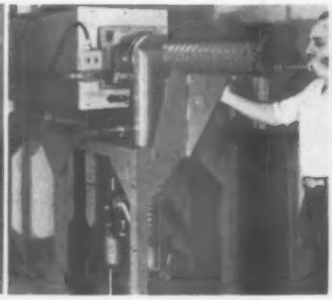
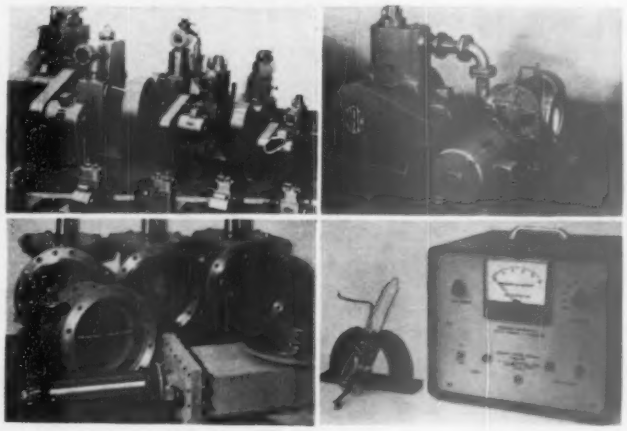
Highly flexible vacuum sources for production and research. Fast and efficient, can operate as low as 10^{-8} mm Hg. range. Available with 2, 4, 6 and 10" diffusion pumps. Self-contained, just plug in power and cooling water.



HEAT TREATING AND OTHER VACUUM FURNACES

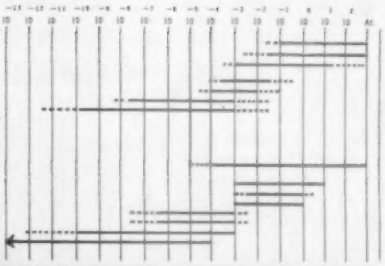
Two-zone, 5" diameter muffle vacuum heat treating furnace. Others available from 2" to 54". Temperatures to 2200°F. Pressure to 10^{-5} mm Hg. Complete line of Vacuum Furnaces — induction, arc, and resistance — with capacities from 2 to 10,000 lbs. Also new Electron Beam Furnaces for ultimate in purity.

HIGH VACUUM PUMPS, GAUGES and VALVES



Pumps	Capacity CFM	"Clean" Vacuum	Remarks
Rotary Gas Ballast:			
Single Stage	1.25-400	no	Gas ballast keeps pump
Two Stage	1.25-400	no	oil free of condensibles
Mechanical Booster	250-4500	yes	Very high speed
			throughout micron range
Booster Diffusion	25-4000	no	Oil and mercury
Sputtered Drag	150	very	For special purpose tubes
Diffusion — Untrapped	70-60,000	no	Oil and mercury
With Cold Trap		yes	Very reliable

Gauges	Linear	Immune to Atm. Press.	Remarks
Alphatron (+) Ionization	yes	yes	Accurate. Wide range
Log Alphatron (+) Ionization	no	yes	Inexpensive. Single scale
Thermocouple	no	yes	Rugged. Inexpensive
Pirani	partially	yes	Linear 1-20 microns
Ionization	yes	no	Accurate. Widely used
Spec. Ionization	yes	yes	Special filament
Bellingham Ionization	yes	no	Indirect readings below 10^{-10}
Redhead	yes	no	Direct readings. Self regulating emission



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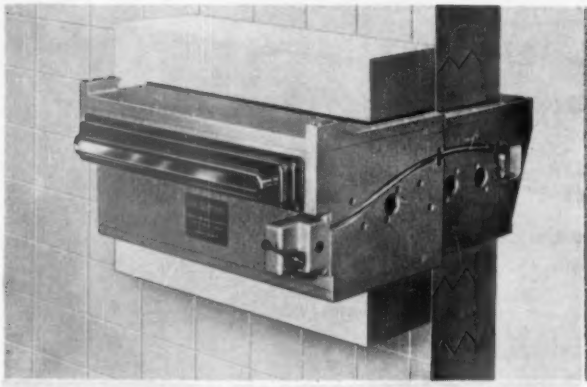

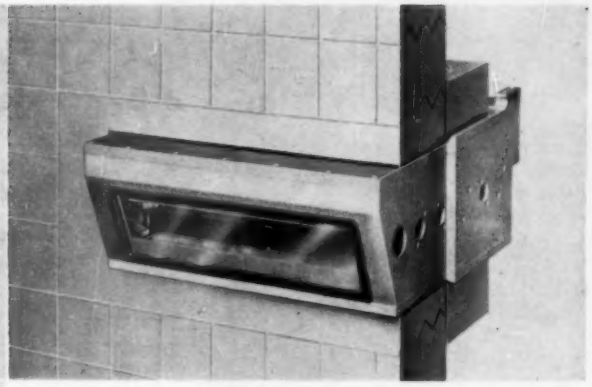

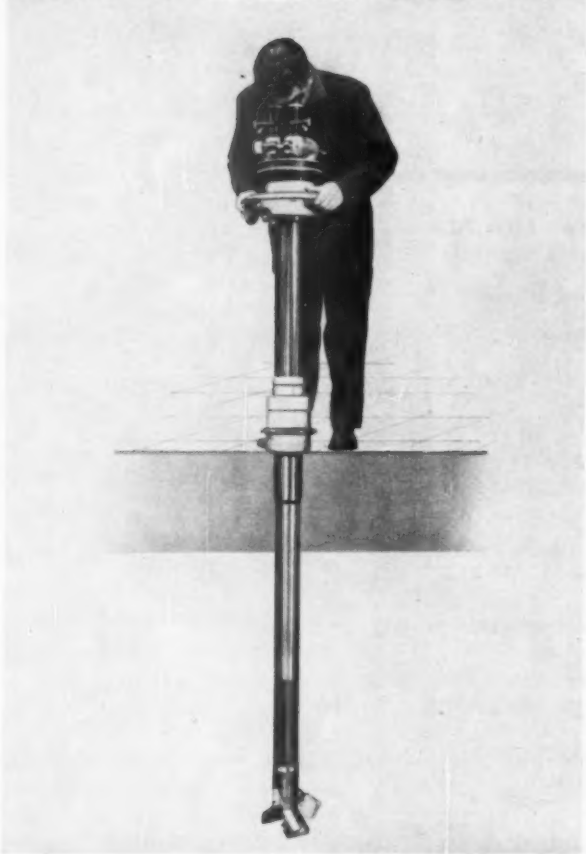

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- ▶Endoscopes
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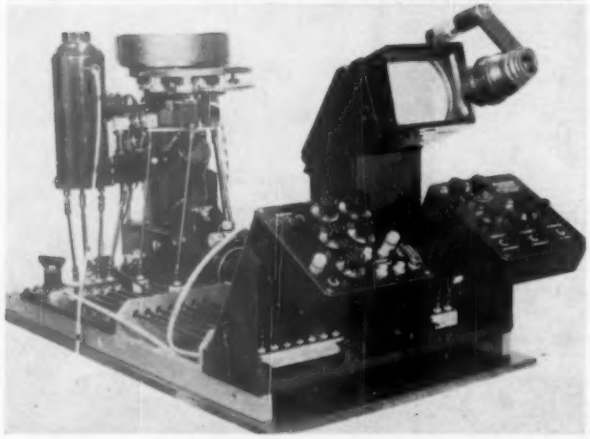

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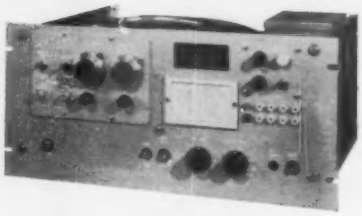

The most popular instrument in the Franklin nuclear line. Used worldwide by every major nuclear laboratory. Available as Model 348A, as illustrated, with Franklin Model 20 Pulse Height Analyzer or as Model 348 without analyzer. Request Data Sheet 2008-N.

MODEL 348 LINEAR AMPLIFIER (ORNL TYPE DD-2)

BRIEF SPECIFICATIONS

Maximum Voltage Gain . . . . . 50,000.
Gain Stability . . . . . 1.0%.
Output Voltage: Max. . . . . ± 120 V.
Overload Recovery from 200X . . . . . 10 u sec.
Linearity: Integral . . . . . 0.15%.
Linearity: Differential . . . . . 2.5%.
Rise Time . . . . . 0.3 u sec.
Price . . . . . Model 348-$785.
Model 348A-$1,060.

Extremely fast overload recovery time and high gain are the major features of this model. (See specifications at right.) Available as Model 358A with Franklin Model 20 Pulse Height Analyzer or as Model 358 without analyzer, as illustrated. Request Data Sheet 2001-N.

MODEL 358 LINEAR AMPLIFIER (ORNL TYPE A-8)

BRIEF SPECIFICATIONS

Maximum Voltage Gain . . . . . 70,000.
Gain Stability . . . . . 0.9%.
Output Pulse Voltage . . . . . ± 110 V.
Pulse Rise Time . . . . . 0.2 u sec.
Overload Recovery from 4000X . . . . . 8 u sec.
Linearity . . . . . 0.1%.
Price . . . . . Model 358-$790.
Model 358D-$1,070.

Used for calibrating and checking nuclear instruments such as linear amplifiers, radiation spectrometers, etc. Generates fast rise-time exponential decay pulses of precisely controllable amplitude. Request Data Sheet 2010-N.

MODEL 370 PRECISION PULSE GENERATOR

BRIEF SPECIFICATIONS

Output Pulse:
Amplitude . . . . ± 10 ± 0.2 V max.
Rise Time . . . . . 7 nanoseconds.
Decay Time . . . . 300 microseconds.
Drift Rate . . . . . 0.02% per day.
Temperature Coefficient less than 0.01%C.
Price . . . . . Model 370-$325.

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PULSE HEIGHT ANALYZER—Used with linear amplifiers or scalers for studying pulse amplitude distribution or nuclear energy distribution. Request Data Sheet 2008-N.
MODEL 20 . . . . . $280

DUAL PULSE HEIGHT ANALYZER—Consists of two Model 20's (as described above) in a single chassis with power supply etc. Request Data Sheet 2026-N.
MODEL 405A $780

PREAMPLIFIERS—Matches high impedance detectors to low impedance inputs such as in the Model 348 (upper left). Request Data Sheets 2001-N and 2008-N.
MODEL 349 . . . . . $47.50
MODEL 359 . . . . . $87.00
MODEL 359H $155.00

PARTICLE SIZE MICROMEROGRAPH—Used to determine with high speed and accuracy the quantity and size of all the particles in a sample of any dry powder. Request Bulletin 101-N.
Price $9500

DIGITAL VOLTMETERS—Used for making fast, precise voltage measurements from ±0.0001 V dc to ±1200 V dc. Unambiguous numerical readout panel. Request Data Sheet 2017-N.

DIGITAL MULTIMETERS—Used for making fast, precise measurements of ac, dc, or ohms. Unambiguous numerical readout panel. Request Data Sheet 2017-N.

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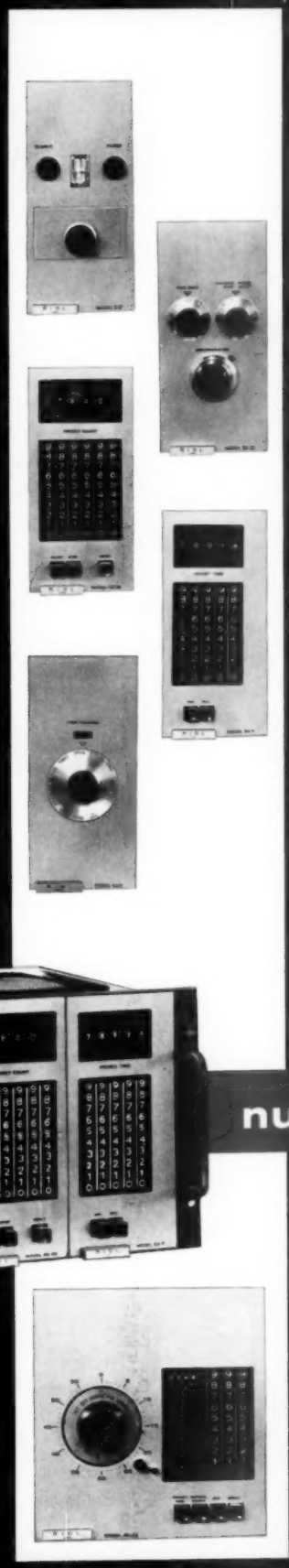

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The first six of this extensive line of transistorized small instruments, now available, greatly improve instrumentation versatility for both small and large educational laboratories and research facilities.

By plugging-in the basic instruments needed to form a system, the user easily prepares for an experiment in minimum set-up time and is assured of perfect system interconnections.

The basic unit common to all systems is a compact instrument case with a self-contained power supply and an internally wired power and control distribution system, the Model 29-1. Instrument Case and Power Supply has built-in compartments which allow the user to position and plug-in four single instruments, or two double instruments (each occupying two compartment positions), or any combination of these. The Model 29-1 Instrument Case weighs 35 pounds and is 19" wide x 8¾" high and 15½" deep.

Development is continuing on many additional plug-in instruments to complement the six now available. The introduction of each new instrument by RIDL will greatly expand overall system capabilities of the Designer Series. Thus, laboratories may purchase instrument packages to meet both current and changing experimental requirements.

Other functional instruments now in final stages of development are: additional High Voltage Power Supplies and Amplifiers, Single-Channel Pulse Height Analyzer and Electronic Sweep, additional Scalers, Scamp System, Rate Meters, and Electrometer.

Side view of Designer Series Scaler.

MODEL 54-7
FIVE DECADE ELECTRONIC TIMER

The Model 54-7 is an electronic timer using the 60 cycle AC line frequency as the primary time base; providing two time ranges with increments of 1/10 minutes and 1/10 seconds.

The time scaler operates as a slave device, depending on external commands for start, stop and reset operations.

SPECIFICATIONS

Ranges: ..... 10^5 minutes, 0.1 minute increments.
10^5 seconds, 0.1 second increments.
Time Base: ..... 60 cycles from A.C. line.

MODEL 2-9
2-Pi GAS FLOW COUNTER

The heart of the Model 2-9 Gas Flow Counter is a specially designed 2-Pi geometry gas flow counter incorporating a convenient sliding drawer sample holder. The self-contained circuits include a (1) proportional pre-amplifier, (2) gain-of-400 linear amplifier, and (3) discriminator which provides four switch-selected discrimination levels (1, 10, 20, and 300mv).

The entire gas flow control system, with the exception of the gas supply, is also contained within the instrument itself. Front panel PURGE and BUBBLE rate valves, and the visual bubble rate indicator, allow flow rate to be adjusted and continuously monitored.

An automatic gas purge system interlocks with the sample drawer lock and initiates a 30 second gas purge each time the drawer LOCK is opened and closed.

The amplifier and discriminator sections are identical to the Model 30-19 Amplifier and Discriminator instrument.

SPECIFICATIONS

Counter Geometry: ..... 2-Pi.
Sample Size: ..... Opening is ⅞" deep and 2½" diameter.
Gas Fill: ..... Geiger Region: Helium Isobutane
Proportional Region: Methane or P-10.
Discriminator Output: ... +10 volts; 1 μ sec wide.
Background: ..... α-0.1 cpm
β & γ 60 cpm

MODEL 49-26
SIX DECADE PRESET COUNT SCALER

The model 49-26 instrument is a 1 microsecond, six decade preset count scaler. Preset is accomplished by means of six 10-position PRESET COUNT thumb wheel switches mounted as a part of each decade. These switches may be set to monitor any one of the 10 decoded outputs on each decade and present a signal to the preset circuitry when the preset state is reached.

SPECIFICATIONS

Input:	10 volt positive pulse.
Count Capacity:	10^6.
Resolution:	Approximately 1 μ sec.
Preset Count Selection:	0 to 1,000,000 all inclusive.
Input Impedance:	220 mmf capacitor in series with approximately 1000 ohms.
Maximum Continuous Count Rate:	150 KC with 6 decade preset 1 MC with 5 decade preset.

MODEL 40-8
HIGH VOLTAGE POWER SUPPLY

The Model 40-8 High Voltage Power Supply employs a full wave voltage tripler, which is applied across a string of sixteen 85A2 reference tubes. The high voltage power supply is primarily used with scintillation counters where load impedance does not change widely.

SPECIFICATIONS

Range:	595—1350 volts D.C.
Polarity:	Positive.
Control:	10 position switch with 85 volt increments.
Regulation:	0.005% variation per one volt change in line voltage.
Current:	1 milliampere.
Output impedance:	100,000 ohms.
Ripple:	Less than 50 millivolts.
Stability:	0.01% per degree centigrade.

MODEL 30-19
AMPLIFIER AND DISCRIMINATOR

The RIDL Model 30-19 Amplifier and Discriminator design is based on that used in RIDL Multichannel Analyzers. The amplifier output is linearly related to the input; the discriminator output is a fixed amplitude generated whenever an output from the amplifier exceeds the adjustable triggering level.

The amplifier section has two cascaded gain-of-20 feedback loops providing a gain of 400 and driving a complementary emitter-follower output stage.

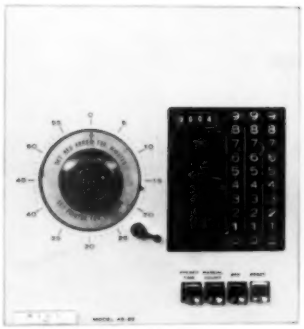
The discriminator provides an output of constant width and amplitude whenever an input pulse exceeds the preset triggering level. The triggering level may be varied continuously over the amplifier's dynamic range.

AMPLIFIER SPECIFICATIONS

Input Impedance:	1,000 to 32,000 ohms dependent on amplifier gain setting.
Input Pulse Polarity:	Positive.
Maximum Gain:	400.
Control Range:	64:1.
Rise Time:	Approximately 0.25 μ sec.
Fall Time:	Same as input signal.
Output:	Positive 0-10 volts.

DISCRIMINATOR

Range:	0.1-10 volts—controlled with 10-turn Helipot. 1, 3, 10, 30, 100, 300 millivolt fixed sensitivity setting.
Input Polarity:	Positive—direct from amplifier output.
Resolution:	Approximately 1 μ sec.
Linearity:	0.25%.
Output:	10 volts positive.



MODEL 49-25
SEVEN DECADE ELECTRO-MECHANICAL SCALER-TIMER

Basically, the Model 49-25 is a combined scaler and timer. As a double instrument package, it occupies two positions when inserted in the Instrument Case. The scaling portion is composed of three cascaded 1 microsecond decades driving a 4-digit electrically reset mechanical register. The combination permits total capacity of 10^7 counts.

The mechanical timer may be selectively preset at 1 second intervals anywhere between 0 and the maximum time capacity of 60 minutes. A momentary-type RESET button resets the decades and register.

SCALER SPECIFICATIONS

Input:	10 volt positive pulse.
Resolution:	Approximately 1 μ sec.
Mechanical:	4 digit, electrically reset maximum—20 pps.
Capacity:	3 decades electronic, 4 decades mechanical, total 10^7.
Maximum Continuous Count Rate:	Approximately 20,000 pps—rate limited by mechanical register.

TIMER

Preset Time Range:	1 second to 1 hour in 1 second intervals. Accurate to 0.1 seconds.

RIDL DESIGNER SERIES SYSTEMS

Following are several systems which you can design from the RIDL Designer Series units now available.

Input signal → Model 30-19 Amplifier & Discriminator → Model 49-25 Scaler-Timer

Input signal → Model 30-19 Amplifier & Discriminator → Model 49-26 Preset Count Scaler ↔ Model 54-7 Electronic Timer

Model 40-8 High Voltage Power Supply → Detector input, Detector H. V. → Model 31-8* Pre-Amplifier → Model 30-19 Amplifier & Discriminator → Model 49-25 Scaler-Timer

Model 40-8 High Voltage Power Supply → Detector input, Detector H. V. → Model 31-8* Pre-Amplifier → Model 30-19 Amplifier & Discriminator → Model 49-26 Preset Count Scaler ↔ Model 54-7 Electronic Timer

*The Model 31-8 is a standard RIDL Transistorized Preamplifier which may be used with detectors operating at voltages up to 2000 V. Conversion gain is approximately one volt per 5 X 10^{-11} coulombs. Dimensions are 2⅞" x 3⅛".

All systems include the Model 29-1 Case and Power Supply, and all necessary interconnecting cables.

Model 40-8 High Voltage Power Supply → Model 2-9 Gas Flow Counter → Model 49-25 Scaler-Timer

Model 40-8 High Voltage Power Supply → Model 2-9 Gas Flow Counter → Model 49-26 Preset Count Scaler ↔ Model 54-7 Electronic Timer

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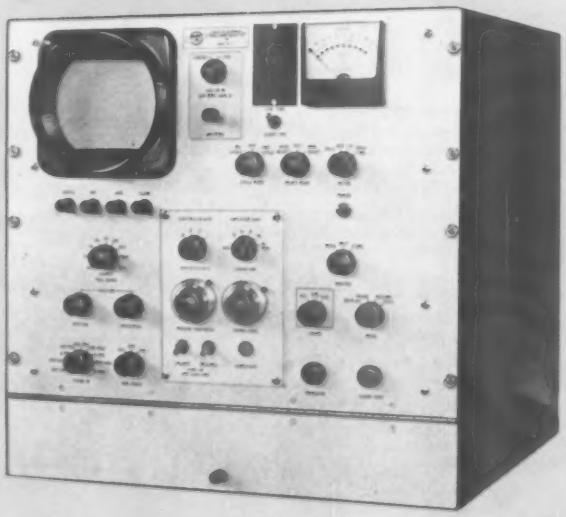

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2N942	2N1918	−8	−25	−25	3.0	3.0	7.80	6.00
2N943	2N1919	−18	−40	−40	2.0	1.0	12.35	9.50
2N944	2N1920	−18	−40	−40	3.0	1.5	8.77	6.75
2N945	2N1921	−50	−50	−50	4.0	2.0	5.20	4.00
2N946	2N1922	−80	−80	−80	4.0	2.0	6.50	5.00

Write for 16 page Technical Application Bulletin #2107 and new Chopper transistor data sheets on types 2N1917 through 2N1922 and 2N941 through 2N946.

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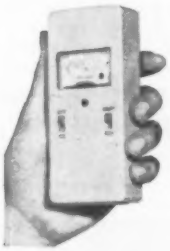

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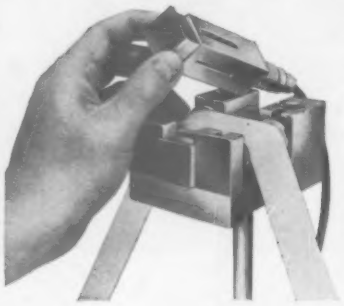
TRITIUM-CARBON RADIO CHROMATOGRAPHS



The chromatogram strip is scanned from both sides with two windowless flow counters (see insert). The chromatogram strip constitutes a part of the cathode of the detector, insuring highest sensitivity for tritium beta rays (Patented). Total background 24 counts/min. The scanning head can be decontaminated through immersion in an ultrasound bath or in boiling detergent. Gas consumption: 1 No. 1A cylinder lasts for 4000 hours.

Model ACSHIC. For continuous processing of ½, 1 and 1½ inch wide chromatogram strips, spliced end to end either during scanning, or stored on reels. With Texas rectilinear recorder, with fingertip control speed selector. Automatic coding with separate marker pen. Rf-values can be read directly from the chart. Complete with counting-rate meter with built-in linear amplifier, pulse height discriminator, 11 ranges, 12 time constants and aural monitor.....$2,200

Model ACSDIC. Same, with dual channel recorder and two countingrate meters. Produces separate plots for tritium and Carbon-14, or for any two tracers on the same chromatogram strip.....$3,500

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Model ACSIIC. Plots besides the curve displaying the activity distribution, with the help of a second pen, in different color, the integrated value of the activity curve, i.e., the area under the peaks. Both pens move across the full, wide-grid (9¾) chart paper. Complete with rate meter.....$3,500

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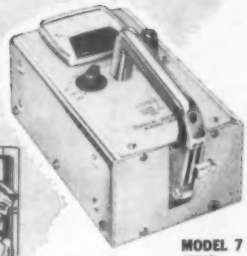

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- Beta-Gamma Hand and Shoe Monitors
- Portal Monitor
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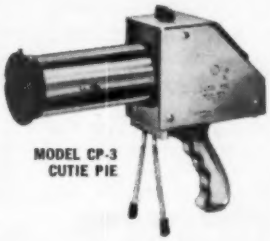
MODEL PFM-8 PORTAL MONITOR

MODEL HSM-10A BETA-GAMMA HAND AND SHOE MONITOR



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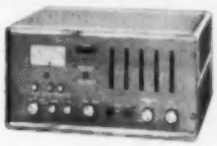

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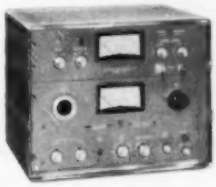

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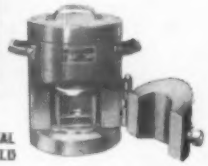

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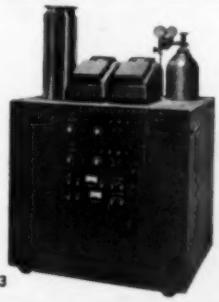

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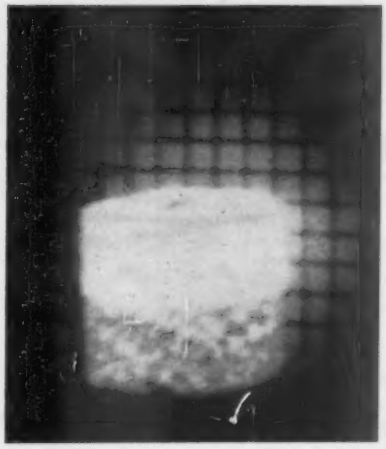

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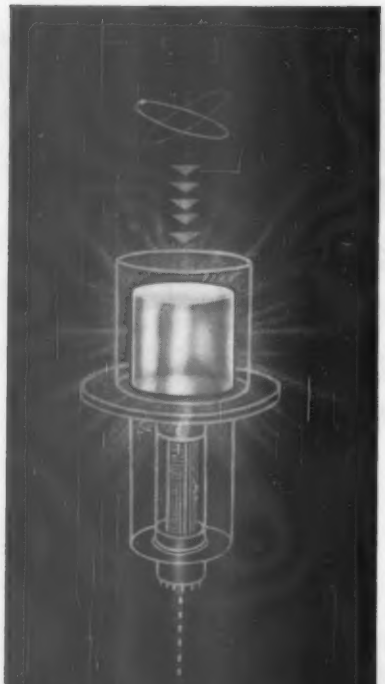

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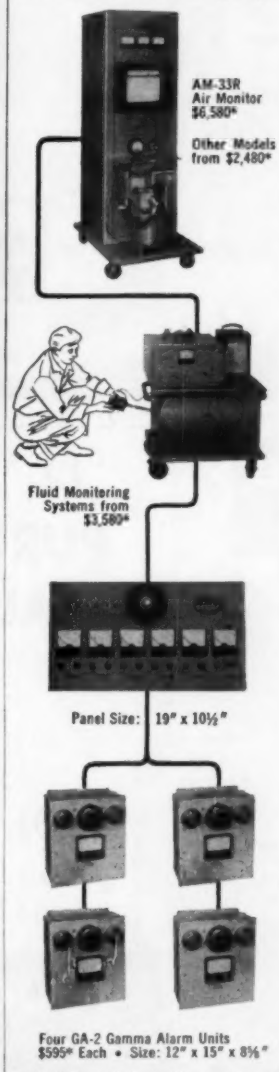

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NMC air monitors offer many exclusive advantages. For example, Model AM-33R shown here detects and identifies long half-life emitters directly, almost immediately, with one detector. Other monitors require five hours or more for identification, due to the natural radon progeny. The four NMC models are . . .

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AM-3A	1	Moving	α, $\beta\gamma$ or γ
AM-22R	3	Fixed	α and $\beta\gamma$ Shows ratio of $\beta\gamma/\alpha$
AM-33R	3	Moving	α and $\beta\gamma$ Shows ratio of $\beta\gamma/\alpha$

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The NMC fluid monitoring system detects radioactivity in gas or water at MAC levels. Used with an NMC air monitor, it measures activity of the gaseous component of the discharge from the air monitor. Contamination and a separate pumping system are eliminated by employing the air pumping system and filter mechanism of the air monitor. The fluid system includes the FMS-1 shield with 30 liter sampling chamber, and two detectors—GM or NaI scintillation—operating in parallel; the LCRM-2M logarithmic count ratemeter with built-in bell and alarm lights; and portable EA graphic recorder.

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Each monitoring station can be connected to a follow meter panel in the central control room with inexpensive unshielded standard electric code wiring. There's a meter for each station to show the radioactivity being detected, and lights to indicate caution and alarm levels. The bell sounds for an alarm condition at any station. Multipoint recorders and remote emergency controls may be connected to the panel.

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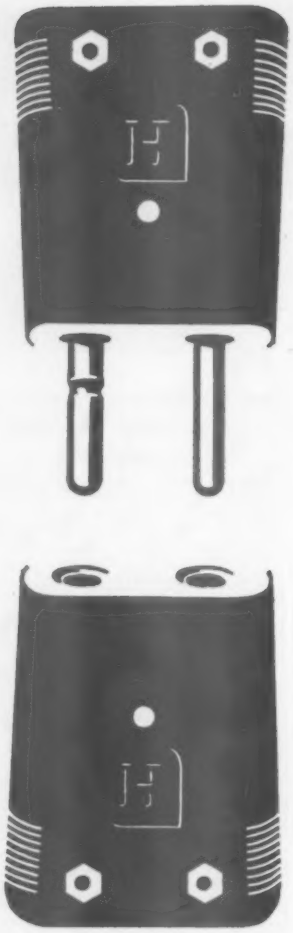

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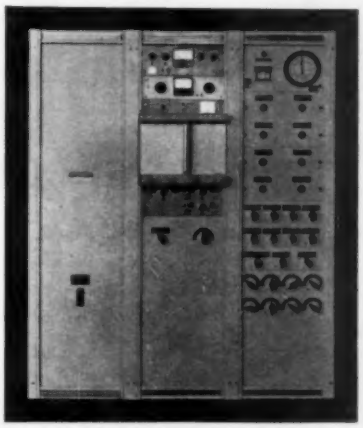

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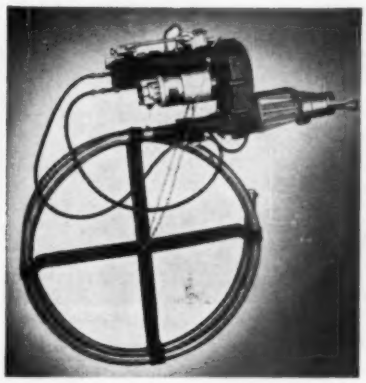

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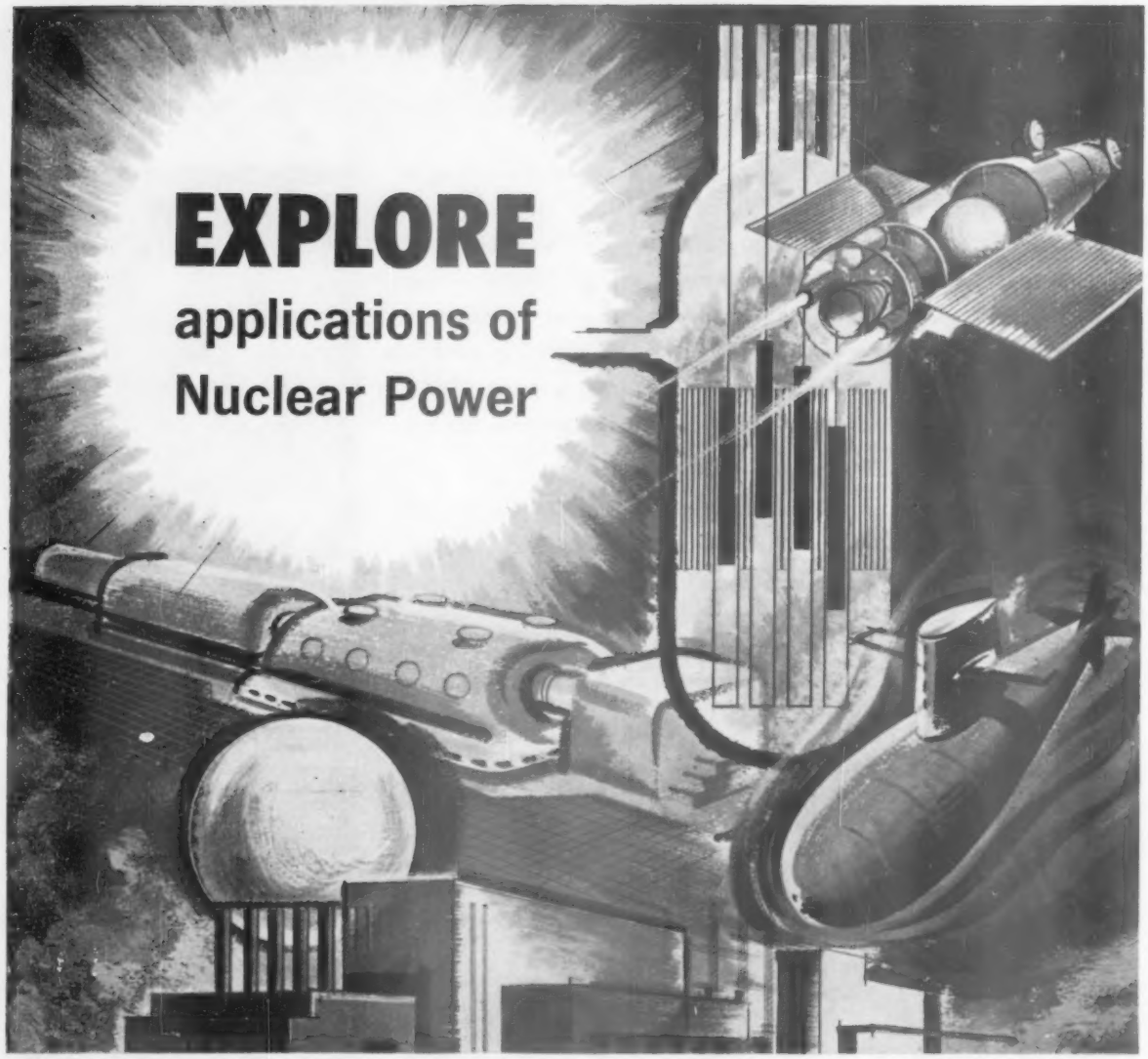

A broad program to explore applications of nuclear power is actively underway at the Research Laboratories. Current projects include performance and cost studies of nuclear power systems for interplanetary space vehicles, small mobile electric power generating plants, and commercial central power stations. Programs are also underway to explore the uses of radioisotopes. Specific areas in which openings exist are described below:

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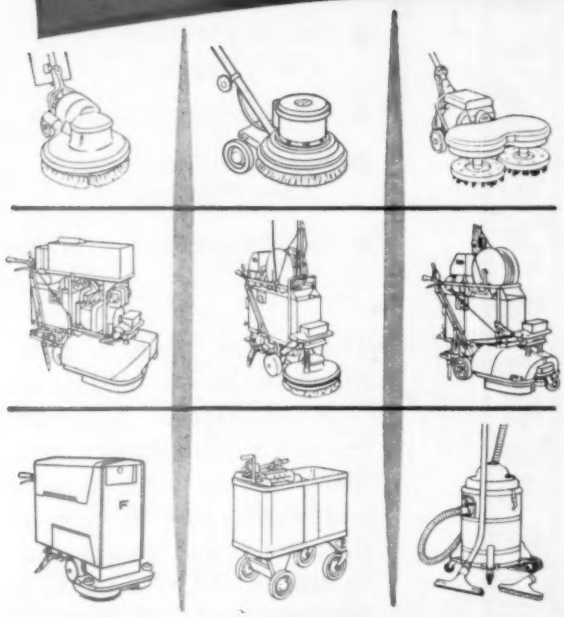

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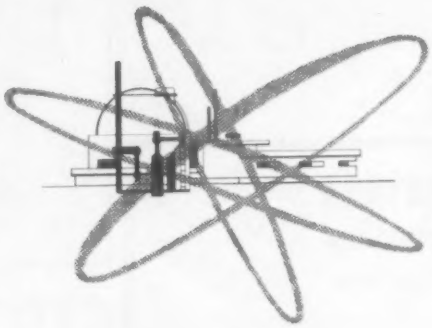

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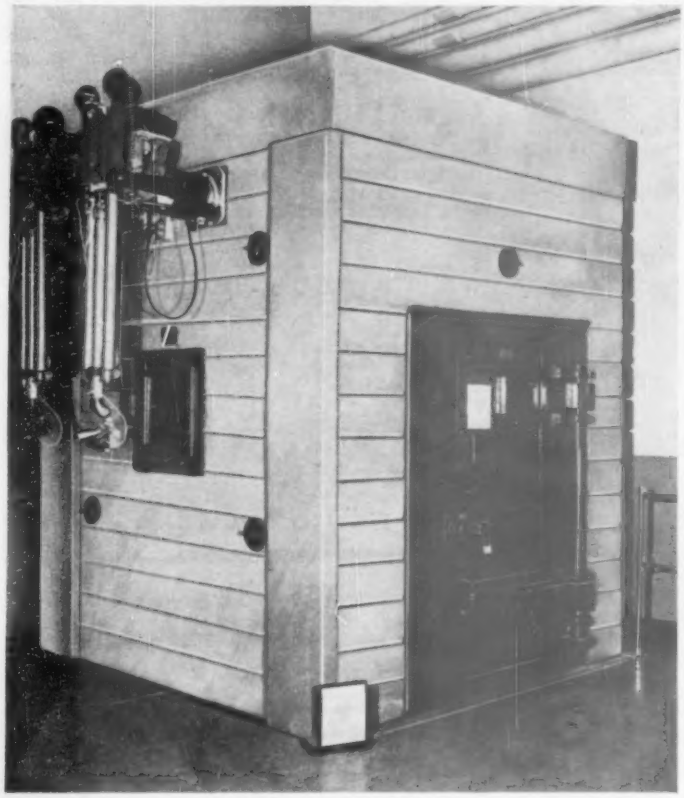

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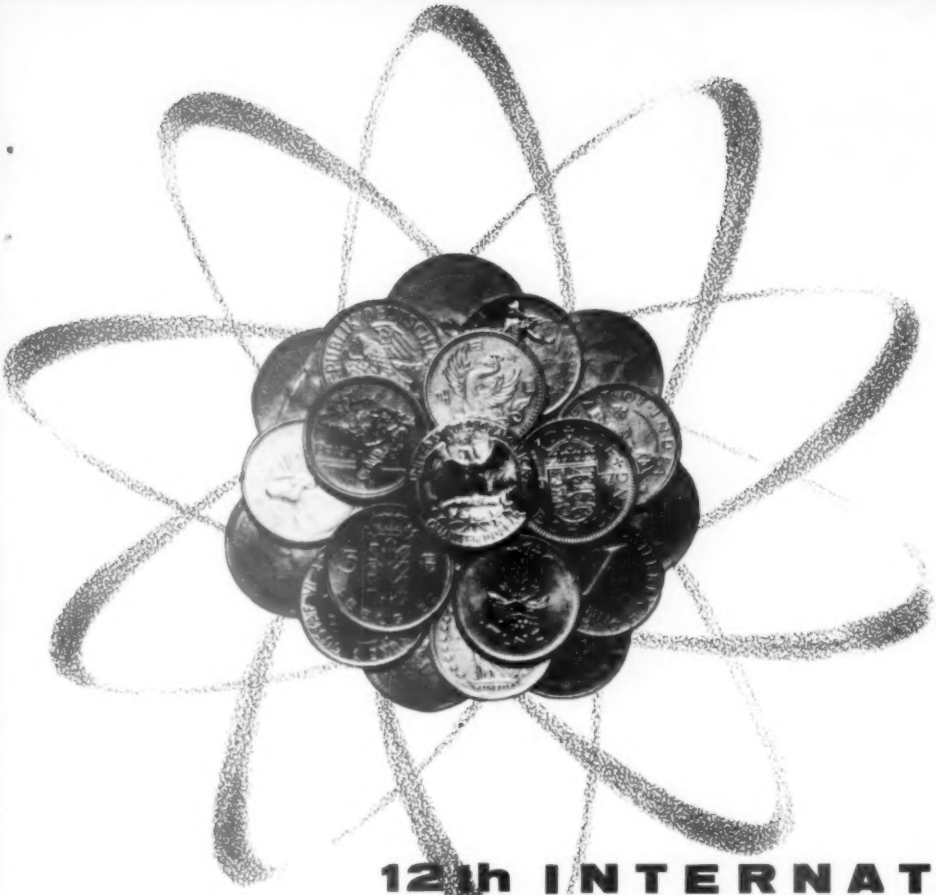

PRODUCTS, MATERIALS & SERVICES / MANUFACTURERS SALES OFFICES

12th INTERNATIONAL NUCLEONICS 1961-62 BUYERS' GUIDE

These listings of products, materials and services for the nuclear field were compiled from information provided by about 2,000 companies. The information is revised annually by submitting questionnaires to suppliers to the field. Every practical effort was made to insure completeness and accuracy.

Names of companies that are advertisers in the BUYERS' GUIDE issue appear in bold type in the product and service listings. Page numbers of the advertisements follow the company names to permit quick reference to advertising pages for more information on products and services.

CONTENTS

The 1961-62 International NUCLEONICS BUYERS' GUIDE contains:

- Approximately 800 product categories
- Greater breakdown of products by sub-classification
- About 250 cross-references
- Manufacturers' sales offices — addresses and phone numbers (Green section)

To get the most out of your BUYERS' GUIDE, read the description below.

...IN PART I (YELLOW SECTION)

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Categories of products, materials and services are listed alphabetically, with the companies supplying them listed alphabetically under each category heading. Advertisers' names are in bold type with advertising page numbers following the company name (for example "Adv Pg 200"). For further details on products and services, refer to the advertising pages.

CROSS REFERENCES. About 250 cross references facilitate finding the proper heading for the product or service you seek. Because terms must be chosen arbitrarily in many cases in compiling a listing such as this Buyers' Guide, we have included enough alternate terms as cross references so that you can find the proper heading quickly.

...IN PART II (GREEN SECTION)

MANUFACTURERS' SALES OFFICES

The Manufacturers Index (green section) lists alphabetically all companies referred to in the Product, Material and Service Directory. The entry for each company contains in the first line the address and telephone number of the main office or plant, which is followed by a maximum of 12 U.S. or foreign sales offices or representatives. After consulting the Product, Material and Service Directory and the advertising pages, call the nearest sales office for further information.

PART I - Product, Material and Service Directory

Every effort has been made to insure completeness and accuracy according to information provided in questionnaires returned by the companies listed. Companies who are advertisers in this issue are indicated by **bold type** in the listings; advertising page numbers follow the company name. Refer to the advertising pages for more information on products, materials and services.

IMPORTANT: Advertising page numbers that contain a letter suffix (for example 112A) appear in the foreign issue of the BUYERS' GUIDE but not in the domestic issue. To obtain this foreign advertising section (without cost to subscribers), send a request on company letterhead to Buyers' Guide Manager, Nucleonics, 330 West 42nd Street, New York 36, N.Y.

NOTE: Some product headings have numbered subcategories (for example "Accelerators" has numbered subcategories for 10 types of accelerator). To indicate which subcategories of a product are manufactured by a company, the company name is followed by the subcategory numbers joined by hyphens. For companies that are advertising, the subcategory numbers precede the advertising page numbers.

Compiled by the Staff of Nucleonics

ABSORBERS—RADIATION
See Also SHIELDING—RADIATION

Anthracite Corporation Co.	1420 Washington Ave., Port Huron	Mich
AMERICAN NUCLEAR CORP. Adv Pg 198	Box 428, Oak Ridge	Tenn
Armstrong-Bernstein Corp	111 W Jewel Ave., St. Louis 22	Mo
ATOMIC ACCESSORIES, INC., Adv Pg 286	811 W Merrick Rd. Valley Stream	NY
Atomic Devel. & Machine Corp.	35-04 120 St. College Point 56	NY
Dentrick Associates, Inc	130 E 63rd St, New York 22	NY
BROOKS & PERKINS, Adv Pg 114	1950 W Fort St. Detroit 16	Mich
General Nuclear Corp.	660-4 5th Ave. New York 36	NY
HARSHAW CHEMICAL CO. Adv Pg 89	1945 E 97th St. Cleveland 6	Ohio
INSTRUMENT & DEVELOPMENT PRODS CO., Adv Pg 284	353 W 108th Pl. Chicago	Ill
Ital Elettronica S.p.A.	Via Ignazio Pecchiaggio 98, Roma	Ital
Kishi Kogyo Corp.	1-6 Wakayama-Dori, Hyogo-ku, Kobe	Jap
Kiwal Diffusion Ltd	232 Warren Rd, Isleworth, Middx.	Eng
Norton Co.	1 New Bond St. Worcester 6	Mass
NUCLEAR-CHICAGO CORP., Adv. Pgs. 56-57	365 E Howard Ave. Des Plaines	Ill
Nuclear Research Applications Ltd.	Bell St. Reigate, Surrey, England	
NUCLEONIC CORP. OF AMERICA, Adv Pg 282	756 Bogart St. Brooklyn 37	NY
Oberpeli Limited & Al Carpbelle Ltd, c/o des Herstal	34 rue des Fabriques, Branch	Belg
Power Equipment, Ltd.	Holmethorpe Ind. Est, Redhill, Surr.	Eng
PHILIPS' GLOEILAMPENFABRIEKEN, N. V., Adv Pg 182	Eindhoven	Neth
PROMOS-DIVISIONS ad, Adv Pg 22	August-Thyssen-Str 1, Dusseldorf	Ger
Picker X-Ray Corp.	25 S Broadway, White Plains	NY
RADIATION COUNTER LABS. INC., Adv. Pgs. 52, 53	5121 W Grace St. Chicago	Ill
RADIATION EQUIP. & ACCESSORIES CORP., Adv. Pg. Inst Cover	440 Merrick Rd. Lynbrook	NY
Serro Nuclear Corp.	35-31 Astoria Blvd. Long Island City	NY
Simonizer Div. Chemalloy Div.	180 Wooster Hwy. West Nyack	NY
TECHNICAL ASSOCIATES, Adv Pg 226	140 W Providencia Ave. Burbank	Cal
TRACERLAB, INC. Adv. Pgs. 124, 113-6	1601 Trapelo Rd. Waltham 54	Mass
UNITED NUCLEAR CORP., Adv Pg 36	563 Shoreham Ave. New Haven 4	Conn

ACCELERATORS
See Also GENERATORS—NEUTRON
1. BETATRON
2. COCKCROFT-WALTON
3. CYCLOTRON
4. DYNAMITRON
5. MICROWAVE LINEAR
6. RESONANT TRANSFORMER
7. SYNCHROCYCLOTRON
8. SYNCHROTRON
9. TRANSFORMER
10. VAN DE GRAAFF

ABB, 3, Adv Pg 173-A	Baden, Frankfurt/Main, Germany	
A.E.I. Ltd. 8-7-10	30 Grosvenor Pl. London SW1, Eng	
ALLIS-CHALMERS MFG. CO. 1-7-8-4, Adv. Pgs. 109-111	935 S 70th St. Milwaukee	Wis
Alsthom, Nuclear Div. 7	38, Ave. Kleber, Paris 16, France	
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, 2, Adv Pg 173-C	Charleroi	Belg
Baldwin-Lima-Hamilton Corp. 1-8-5-7-9	Dept. N 8, Philadelphia 42	Pa
Cosmic Technological Corp. 9	1020 Connecticut Ave, Washington 6	DC
Curtiss-Wright Corp. Princeton Div. 1	Box 110, Princeton	NJ
DEL ELECTRONICS CORP. 9, Adv Pg 38	521 Hempstead Ave. St. Vincent	NY
Denver Research Div. Denver Ind. Inc. 10	10700 Independence St. Tulsa	Okla
Fuji Electric Mfg Co Ltd 1-9-2-4-5-7-9	2-1 Marunouchi, Chiyoda-ku, Tokyo	Jap
Hamada Seki Transformer Co. Div., Denver Ind. Inc. 9	555 N 5th St. Garland	Tex
HIGH VOLTAGE ENGINEERING CORP. 5-6-10, Adv Pg 179	1 Bulford St. Burlington	Mass
High Voltage Servicing Co Ltd 2-5-9-10	60 Carpenters Wood Dr, Chesley Wood, Hants, England	
Hitachi, Ltd, 1-2-5-10	1-4-chome Marunouchi, Chiyoda-ku, Tokyo	Jap
HUGHES AIRCRAFT CO. NUCLEONICS LAB. 3-5, Adv Pg 300	Box 2097, Fullerton	Cal
KAMAN NUCLEAR, 3-5-8, Adv. Pgs. 190, 191	Garden of the Gods Rd. Colo Springs	Colo
McPhar-Roberts Ltd., 9	130 Bond Ave, Don Mills	Ont
MERATOM, N. V., 3-5-6-7, Adv Pg 173-F	Hazelaarlaan 38, The Hague	Neth
Oerlikon Engineering Co. 3-8	Zurich 50, Switzerland	
PACIFIC COAST ENGINEERING CO. 5-8, Adv Pg 288	Denver E, Alameda	Cal
Pascal Ltd. 1	Vale Rd. Windsor, Berks, England	
Philips Electronic Instruments, 2-5-7	750 S Fulton Ave. Mt. Vernon	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. 3-7, Adv Pg 187	Eindhoven	Neth
Quantaplex, 9	Box 305, Woodland Hills	Cal
Radiation Dynamics Inc. 4	Westbury Industrial Pk. Westbury	NY
S.A.R.E.S. 10, Adv Pg 284	21 rue Jean Baus, Grenoble, Isere	Fr
Siemens-Reiniger-Werke AG. 1	Leipziger, 65, Erlangen, Germany	
Siemens Schuckertwerke AG, 9	Werner-von-Siemens Str. 50, Erlangen	Ger
TRC, Inc, 6	2 Austal Way, Syosset	NY
Texas Nuclear Corp. 9	Box 9267, Allandale Sta, Austin 12	Tex
TOKYO SHIBAURA ELECTRIC CO. LTD. 1-3-5-6-7-8-9-10, Adv Pg 229	72 Yanagi-cho 1-Chome, Chiyoda-ku, Tokyo	Jap
Varian Associates, 5	611 Hansen Way, Palo Alto	Cal
X-Ray Dept. General Electric Co. 8	4855 Electric Ave, Milwaukee	Wis

ACCESS LOCKS—PRESSURE-TIGHT
See DOORS—AIRTIGHT ACCESS

ACTIVATION ANALYSIS
See SERV. & CONS'LT: ACTIVATION ANALYSIS

ACTUATORS—ELECTROMECHANICAL

A.E.I. Ltd.	30 Grosvenor Pl, London SW1, Eng	
Alsthom Accessories Corp.	1434 Chestnut Ave, Hillside 5	NJ
ALLIED ENGINEERING & PRODUCTION CORP., Adv Pg 343	3420 Blending Ave. Alameda	Cal
American Beach Arms Corp.	350 Pulaski Ave, Hempstead	NY
American Instrument Co. Inc.	8030 Georgia Ave. Silver Spring	Md
Automatic Div. North American Aviation	9150 E Imperial, Downey	Cal
Beckle Corp-Beckle Pacific Div.	13600 Sherman Way, N Hollywood	Cal
Cannon Electric Co.	3209 Humboldt St. Los Angeles 31	Cal
Consolidated Controls Corp.	16 Durant Ave. Bethel	Conn
Devonsure & Co., Ltd.	Great Dover St. London SE1, England	
Electric Rod Div. Gen. Dynamics Corp.	Industrial Services Dept. 008, Groton	Conn
Electricite Mon Fer S'	11 rue Petit, Chilly Sulin	Fr
Frenkel & Vignoles, Ltd. Acton Lane Wks.	Chiswick, London W4	Eng
EX-CELLO CORP. ATOMICS DIV., Adv. Pgs. 8,9	1300 Dakota Blvd. Detroit 22	Mich
Fisher Governor Co.	Box 507, Marshalltown	Iowa
Garrett Corp.	9851 Sepulveda Blvd, Los Angeles 45	Cal
General Controls Co.	801 Allen Ave, Glendale 1	Cal
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 12	1 River Rd. Schenectady 5	NY
Goldsmith Controls Inc.	Hicksville	NY
Hamm Engineering Works	1707 Elston Ave, Chicago 22	Ill
Hopkins Co., A. W.	888 N Elm St, Waterbury	Conn
Hydro Controls Div. Ordnance Corp.	105 River Rd. Cos Cob	Conn
Hoover Electric Co	Port Columbus Arpt, Columbus 19	Ohio
Jordan Controls Inc.	5656 W Thorncrest Ave, Milwaukee 9	Wis
LAMBLAN INC. SUB. DYNALECTRON INC., Adv Pg 284	7400 W Wilson Ave. Chicago 31	Ill
Ledex, Inc.	250 Webster, Dayton 2	Ohio
Marvel-Schebler Products Div., Deep-Water Corp.	5100 S Ellis St. Decatur	Ill
MINN-HONEYWELL REG CO. SUB. PRODS GROUP, Adv. Pgs. 138, 140	Wayne & Walnut Aves. Phila. 44	Pa
Midland Instruments Inc.	461 Lexington Ave. New York 17	NY
NEWBROOK MACHINE CORP., Adv Pg 93	Silver Creek	NY
Republic Flow Meter Co.	5200 Dewsnap Pkwy, Chicago 47	Ill
Spectrol Electronics Corp.	1704 E 2nd Ave Ave, San Gabriel	Cal
Sperry Phoenix Co, Div, Sperry Rand Corp.	21111 N 19 Ave, Phoenix	Ariz

Tapco Div. Thompson Ramo Wooldridge Inc. ..... 23555 Euclid Ave., Cleveland 17 ..... Ohio
Technology Instrument Corp ..... 551 Main St, Acton ..... Mass
Telecomputing Corp. ..... 8125 Aero Dr. San Diego 11 ..... Cal
TELEFLEX INC. Adv Pg 240 ..... Church Rd. North Wales ..... Pa
Thermocouple Products Inc. ..... 701 N Iowa St. Ville Park Ill
TOKYO SHIBAURA ELECTRIC CO. LTD. 12 Yoroku-cho 1-Chome, Chiyoda-ku, Adv Pg 229 ..... Tokyo ..... Jap
UNITED NUCLEAR CORP., Adv Pg 36 ..... 365 Winchester Ave. New Haven 4 ..... Conn
United Control Systems, Inc. ..... 910 Woerfley Rd. Dayton 3 ..... Ohio
United Shoe Machinery Corp.
Atomic Power Dept. ..... Balch St. Beverly ..... Mass
Vacuum Research (Cambridge) Ltd. ..... Quayside, Bridge St. Cambridge ..... Eng
VARI, Adv Pg 125 ..... 2901 E Colorado, Pasadena ..... Cal
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. SECT.
Adv. Pgs. 70, 71 ..... Pittsburgh ..... Pa

ADHESIVES

American Products Mfg. Co. Inc. ..... 8127-33 Chandler St. New Orleans 18 ..... La
Armstrong Cork Co. ..... Lancaster ..... Pa
Auburn Mfg. Co. ..... 600 Stack St. Middletown ..... Conn
Bacon Industries, Inc. ..... 198 Pleasant St. Watertown ..... Mass
Biggs Co., Carl H. ..... 1847 16th St. Santa Monica ..... Cal
Catheline Co. ..... 30 Hartley Ind. Ct. St. Louis 17 ..... Mo
Chemical Process Co. ..... Box 8025, Redwood City ..... Cal
Degussa ..... Box 1080 Frankfurt/Main ..... Ger
du Pont de Nemours & Co. Inc., E. I. ..... Wilmington 98 ..... Del
Engelhard Industries, Inc. ..... 113 Astor St. Newark 5 ..... NJ
Fosser Co., Benjamin ..... 4035-37 W Girard Ave, Philadelphia 31 ..... Pa
Hysol Corp. ..... 1025 Houghton Ave. Clifton ..... NY
Mennington Paisley, Inc. ..... 410 W 41st St. New York 19 ..... NY
Permaglide Corp. of America ..... 34-43 60th St. Woodside ..... NY
Philadelphia Quartz Co. ..... 1344X Public Ledger Bldg. Phila. 6 ..... Pa
Polymer Industries, Inc. ..... Springdale ..... Conn
Radiation Applications, Inc. ..... 36-40 37th St. Long Island City 1 ..... NY
Raphanus-Manhattan, Inc. ..... Arnold & Stogel Sts. Manheim ..... Pa
Rubber & Asbestos Corp. ..... 225 Belleville Ave. Bloomfield ..... NJ
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229 ..... 33 Bd G. Clemenceau, Courbevoie, Seine ..... Fr
United Shoe Machinery Corp.
Atomic Power Dept. ..... Balch St. Beverly ..... Mass
Vorac Co. ..... 147 Meadow Rd. Rutherford ..... NJ

AGGREGATES—CONCRETE
See SHIELDING—RADIATION

AIR-CLEANING SYSTEMS
See Also AIR-CONDITIONING UNITS

Air & Refrigeration Corp. ..... 459 Madison Ave, New York 17 ..... NY
American Air Filter Co. ..... 215 Central Ave. Louisville 8 ..... Ky
CAMBRIDGE FILTER CORP. Adv Pg 127 ..... 730 Erie Blvd. E, Box 1288, Syracuse 1 ..... NY
Carrier Air Conditioning Co. ..... Carrier Pkwy, Syracuse 1 ..... NY
CONTROLLED ATMOSPHERE ENCLOSURES MFG CO
Adv Pg 38 ..... Lunsford Air Base, Marianna ..... Fla
Donaldson Co. Inc. ..... 666 Pelham Blvd. St. Paul 14 ..... Minn
GELMAN INSTRUMENT CO. Adv Pg 232 ..... Box 1148-E, Chelsea ..... Mich
General Electric Co. Ltd. of England ..... Erith, Kent, England
Gruner Water Conditioning Co. ..... 216 W 14 St. New York 11 ..... NY
HYDROPINE CORP. Adv Pg 139 ..... 7230 Coldwater Canyon Ave. N. Hollywood ..... Cal
Johnson Corp ..... 900 West St. Three Rivers ..... Mich
Kranz Luftechnik, H. ..... Aachen-Rothe Erde ..... Ger
Pulverizing Machinery Co. Div. American Machinery Co. ..... 50 Chatham Rd. Summit ..... NJ
Trent Mfg. Co. ..... 1180 Raymond St. St. Paul ..... Minn
Tuve Inc. ..... 1000 Island Ave, McKees Rocks ..... Pa
Wheelabrator Corp. ..... 1400 S Byrkit St. Mishawaka ..... Ind
York Corp. ..... Graybar Rd. York ..... Pa

AIR COMPRESSORS
See COMPRESSORS—AIR AND GAS

AIR-CONDITIONING UNITS
See Also FANS & BLOWERS

A.E.I. Ltd. ..... 30 Grosvenor Pl, London SW1, Eng
Aerialite Ltd. Castle Wks. ..... Stalybridge, Cheshire ..... Eng
Air & Refrigeration Corp. ..... 459 Madison Ave. New York 17 ..... NY
Airflow Co. ..... 400 S Dynamite Ave, Evansville ..... Ind
American Air Filter Co. ..... 215 Central Ave. Louisville 8 ..... Ky
American-Standard Industrial Div. ..... Detroit 32 ..... Mich
Canadian Westinghouse Co. Ltd. ..... Box 510, Hamilton, Ontario, Canada
Carrier Air Conditioning Co. ..... Carrier Pkwy. Syracuse 1 ..... NY
Dr. Vieser KG ..... 30 Bonnenbergweg, Bonn ..... Ger
Electric Boat Div. Gen. Dynamics Corp. ..... Industrial Services Dept. 600, Groton ..... Conn
Garrett Corp. ..... 9851 Sepulveda Blvd. Los Angeles 45 ..... Cal
Hess-X, Inc. ..... Brewster ..... NY
Kranz Luftechnik, H. ..... Aachen-Rothe Erde ..... Ger
Martin, Ltd., R. O. ..... Brown Rd. Coventry ..... Eng
Remington Air Conditioning Div. of Remington Corp. ..... Willow St. Auburn ..... NY
Sulzer Bros. Ltd. ..... Winterthur ..... Switz
Telecomputing Corp. ..... 8125 Aero Dr. San Diego 11 ..... Cal
WORTHINGTON CORP.
Adv. Pg. 2nd Cover ..... 401 Worthington Ave. Harrison ..... NJ
York Corp. ..... Graybar Rd. York ..... Pa
Young Radiator Co. ..... 700 S Marquette St, Racine ..... Wis

AIR-FILTER CHANGERS

American Air Filter Co. ..... 215 Central Ave. Louisville 8 ..... Ky
Donaldson Co. Inc. ..... 666 Pelham Blvd. St. Paul 14 ..... Minn
Pall Corp. ..... Glen Cove ..... NY
Uranium Instruments Co. ..... Box 1191, Grand Junction ..... Colo
York Corp. ..... Graybar Rd. York ..... Pa

AIR FILTERS
See FILTERS—AIR

AIR LOCKS
See DOORS—AIRTIGHT ACCESS

AIR-MONITORS—RADIOACTIVITY
See Under MONITORS

AIR SAMPLING
See SERV. & CONS'LT: SAMPLING, AIR & WATER

ALARMS AND ANNUNCIATORS
1. FLOW
2. PRESSURE
3. RADIATION
4. TEMPERATURE

AEG, 1-3-3-4, Adv Pg 113-A ..... Nuetheuer, Frankfurt/Main, Germany
Advanced Technology Labs. 4 ..... 395 Wiseman Rd. Mountain View ..... Cal
Allied Research Associates, Inc. 3 ..... 43 Leon St, Boston 15 ..... Mass
American Instrument Co. Inc. 4 ..... 8030 Georgia Ave. Silver Spring ..... Md
AMERICAN NUCLEAR CORP. 3
Adv Pg 198 ..... Box 428, Oak Ridge ..... Tenn
Appleby & Ireland, Ltd., 1-4 ..... Mark Lane, Bedingeonin, Essex ..... Eng
Assembly Products, Inc. 4 ..... 75 Wilson Mills Rd. Chesterland ..... Ohio
Atomic Devel. & Machine Corp. 3 ..... 15-04 120 St. College Point 56 ..... NY
Autocell Co. 1-4 ..... Shelby ..... Ohio
Avo Ltd. 3 ..... 19-99 Vauxhall Bridge Rd. London, SW1 ..... Eng
BAILEY METER CO. 1-3-4
Adv Pg 69 ..... 29801 Euclid Ave. Wickliffe ..... Ohio
Bailey Meter Co. Ltd. 1-3-4 ..... 5010 St. Catherine St. W, Montreal, Que ..... Can
Bendix Ericsson U.K. Ltd. 3 ..... High Church St, New Romford, Essex ..... Eng
Berwick Associates, Inc. 3 ..... 150 E 52nd St, New York 22 ..... NY
Bristol Co. 1-3-4 ..... Box 1790 WBG, Waterbury 20 ..... Conn
Brown Instruments Co. Inc. ..... 407 W Vine St. Hatfield ..... Pa
Buhl Co. Instruments Div. 3 ..... Box 968, Phoenixville ..... Pa
Burling Instrument Co. Inc. 4 ..... 16 River Rd. Chatham ..... NJ
Cambridge Instrument Co., Ltd. 3-4 ..... 13 Grosvenor Pl. London SW1, Eng
Computyne Corp. 1-3-3-4 ..... 400 S Warminster Rd. Hatboro ..... Pa
Consolidated Controls Corp. 2 ..... 14 Durant Ave. Bethel ..... Conn
CONTROLS FOR RADIATION, INC. 3
Adv Pg 109 ..... 130 Alewife Brook Pkwy. Cambridge 40 ..... Mass
Copes-Vulcan Div. Blaw-Knox Co. 1-3-4 ..... 900 W 50 St. Erie 4 ..... Pa
Curtiss-Wright Corp. Princeton Div. 3-4 ..... Box 230, Princeton ..... NJ
Dynatron Inc. Control Systems Div. 1-3-3-4 ..... 4450 Mitcher Rd. La Jolla ..... Cal
Delta Design, Inc. 4 ..... 3130 Adams Ave. San Diego 16 ..... Cal
Dietz Co. Inc., Henry G. 1-3 ..... 13-16 Astoria Blvd. Long Island City 5 ..... NY
Dr. Vieser KG ..... 30 Bonnenbergweg, Bonn ..... Ger
Dynatech Corp. 1-3-4 ..... 600 Mountbrooks Ave. Cambridge 39 ..... Mass
EBERLINE INSTRUMENT CORP. 3
Adv Pg 115 ..... Box 279, Santa Fe ..... Mex
Eclanch AG, J.C. 1-3-4 ..... Frankfurt/M, Hanauer-Landstrasse ..... Ger
EDGERTON, GERMESHAUSEN & GRIER, INC. 3
Adv Pg 189 ..... 168 Brookline Ave. Boston 15 ..... Mass
Edison Ind., Thomas A., Instr. Div. McGraw-Edison Co. 3-4 ..... 60 Lakeside Ave. West Orange ..... NJ
Electric Boat Div. Gen. Dynamics Corp. 3-4 ..... Industrial Services Dept. 600, Groton ..... Conn
Equipment Associates Bendix Labs. 3 ..... Box 1984, Ann Arbor ..... Mich
Evershed & Vignoles, Ltd. Acton Lane Wks. 1-3-4 ..... Chiswick, London W4 ..... Eng
Fielden Electronics Ltd. 3-4 ..... Sunrise Rd. Wythenshawe, Manchester 22, England
Fisher & Porter Co. 1-3-4 ..... 50 Warminster Rd. Warminster ..... Pa
FOXBORO CO. 1-3-3-4, Adv Pg 189 ..... 38 Neponset Ave. Foxboro ..... Mass
FRESEKE & HOEPFNER GMBH, 3
Adv Pg 113-N ..... Erlangen-Bruck ..... Ger
GELMAN INSTRUMENT CO. 3
Adv Pg 232 ..... Box 1148-E, Chelsea ..... Mich
General Dynamics/Electronics, 1-3-3-4 ..... 100 Carlton Rd. Rochester 3 ..... NY
GENERAL ELECTRIC CO. APPARATUS SALES, 3
Adv. Pgs. 11, 12 ..... 1 River Rd. Schenectady 5 ..... NY
General Nuclear Corp. 3 ..... 2202 S Cypress Ave, Fullerton ..... Cal
HAGAN CHEMICALS & CONTROLS, INC. 4
Adv Pg 28 ..... Box 1346, Pittsburgh 30 ..... Pa
Hastings-Raydist, Inc. 1-3 ..... Newcomb Ave. Hampton ..... Va
Hays Mfg. Co. 1 ..... 814 W 12th St. Erie ..... Pa
Honeywell Controls, Ltd. 1-3-4 ..... Vandenhoof Ave. Toronto, Ont Canada
Information Systems, Inc. 1-3-4 ..... 10131 National Blvd. LA 34 ..... Cal
Instruments Inc., 3 ..... Box 566, Tulsa ..... Okla
INTERPE DEVELOPMENTS LTD. 3
Adv Pg 76 ..... Bath Rd. Beenham, Reading, Berks ..... Eng
JOHNSON & ASSOCIATES, INC., WILLIAM H. 3
Adv Pg 226 ..... Box 475, Montvale Lakes ..... NJ
Kahl Scientific Instrument Corp. 3-4 ..... Box 1165, El Cajon ..... Cal
Kahlenberg Bros. Co. 3 ..... 12 & Mineral Sts. Two Rivers ..... Wis
Kidde & Co. Inc., Walter, 4 ..... 577 Main St, Belleville 9 ..... NJ
LABLAIR INC. DIV. DYNALECTRON INC. 3
Adv Pg 204 ..... 7464 W Wilson Ave. Chicago 31 Ill
Leeds & Northrup Co. 4 ..... 4901 Stenton Ave. Phila 44 ..... Pa
Leeds & Northrup Ltd., 4 ..... Broad St. Birmingham 19 ..... Eng
L'Electronique Appliquee, 3 ..... 26 rue de Docteur Finlay, Paris 15 ..... Fr
LIONEL ELECTRONIC LABS. 3
Adv Pg 240 ..... 1226 Flushing Ave. Brooklyn 37 ..... NY
Lock & Co. Ltd., A. H. 3-4 ..... Union St. Oldham, Lancs ..... Eng
Lockheed Aircraft Corp. 3 ..... Box 551, Burbank ..... Cal
Lundell & Co. 1-3-3-4 ..... 7700 Stony Island Ave. Chicago 49 Ill
MELLON, INC., GEORGE T. 3
Adv Pg 183 ..... 153 Nassau St. New York 38 ..... NY
Menlo Research Laboratory, 3 ..... 1027 Bay Rd. East Palo Alto ..... Cal
MINN-HONEYWELL REG CO. MIN. PROD. GROUP, 3
Adv. Pgs. 128, 129 ..... Wayne & Hudson Aves. Phila. 44 ..... Pa
Nash & Thompson Ltd. 1-3 ..... Hook Rise S, Tolworth, Surbiton, Surrey ..... Eng
National Research Corp. 3 ..... 70 Memorial Dr. Cambridge 42 ..... Mass
Negretti & Zambra (Canada) Ltd. 1-3-4. ..... 4 Barnhill Rd. Toronto 14 ..... Ont
NUCLEAR-CHICAGO CORP. 3
Adv. Pgs. 34-35 ..... 333 E Howard Ave. Des Plaines Ill
NUCLEAR CORP OF AMERICA, INST & CON DIV, 3,
Adv Pg 94 ..... 2 Hunewell Pl. Dunellen ..... NJ
Nuclear-Electronics Corp. 3 ..... 5001 N Broad St. Philadelphia 22 ..... Pa
NUCLEAR ENTERPRISES LTD. 3
Adv Pg 194 ..... 330 Bury St. Winnipeg 21 ..... Man
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), 3,
Adv. Pgs. 222, 226, 231 ..... 1000 Vanoc St. Apollo ..... Pa
NUCLEAR MEASUREMENTS CORP. 3,
Adv Pg 237 ..... 3400 N Arlington Ave. Indpls. 16 ..... Ind
NUCLEONIC CORP. OF AMERICA, 3,
Adv Pg 202 ..... 186 Dupont St. Brooklyn 21 ..... NY
Clement Corp. 3 ..... 2236 Bogen St. Cincinnati 22 ..... Ohio
Power Equipment, Ltd. 3 ..... Helmethorpe Ind Estate, Redhill, Surrey ..... Eng
Pneullit Div. ILI Inc., 1-3-3-4 ..... 7401 N Hamlin Ave. Skokie Ill
Pneurop Ltd. 3 ..... 56 Princes St. Hanover Sq. London W1 ..... Eng
Philips Electronic Instruments, 3 ..... 700 S Fulton Ave. Mt.Vernon ..... NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. 3-4,
Adv Pg 187 ..... Eindhoven ..... Neth
Pontenlabs & Co. mbH 4 ..... Box 2705, Frankfurt/Main 1, Germany
Powertron Ultrasonics Corp., 1 ..... Expwy, Ind. Pk. Plainview ..... NY
RADIATION COUNTER LABS. INC. 3,
Adv. Pgs. 82, 83 ..... 5122 W Grove St. Skokie Ill
RADIATION EQUIP. & ACCESSORIES CORP. 3,
Adv. Pg. 3rd Cover ..... 466 Hamlin Rd. Lyndonvl ..... NY
RADIATION TECHNOLOGY, INC. 1-2-3-4,
Adv. Pg. 3rd Cover ..... 437 Ashton St. NW, Atlanta 18 ..... Ga
Rochester Instrument Systems Inc. 1-2-3-4 ..... 276 N Union St. Rochester 6 ..... NY
S.A.I.P. 3 ..... 50, Rue Gabriel Crie, Malakoff, Seine ..... Fr
Scott Instrument Corp. ..... 3101 N Lowell Ave. Chicago 41 Ill
Schenk & Kesseling Co. 1 ..... Cornwell Heights, Berks County ..... Pa
Siemens & Halske AG, 1-3-3-4 ..... Rheinbrueckenstr. 50, Karlsruhe ..... Ger
Simmonds Precision Products Inc. 3-4 ..... 100 White Plains Rd. Tarrytown ..... NY
Taylor Instrument Cos. 1-3-4 ..... 80 Arnet St. Rochester 1 ..... NY
Technical Operations, 3 ..... South Ave. Burlington ..... Mass
TERMINAL RADIO INTERNATIONAL LTD. 1-3,
Adv Pg 113-C ..... 340 W 17th St. New York 11 ..... NY
THERMO ELECTRIC CO. INC. 4,
Adv Pg 200 ..... Saddle Brook ..... NJ
Thompson, Ltd., John, 1-3-4 ..... Wolverhampton ..... Eng
TOKYO SHIBAURA ELECTRIC CO. LTD. 12 Yoroku-cho 1-Chome, Chiyoda-ku, 3-4, Adv Pg 229 ..... Tokyo ..... Jap
TRACERLAB, INC. 3,
Adv. Pgs. 124, 125-A ..... 1601 Trapelo Rd. Waltham 54 ..... Mass
Uranium Instruments Co. 3 ..... Box 1191, Grand Junction ..... Colo
Velonic Instruments Corp. 3-4 ..... 195 E Merrick Rd. Freeport ..... NY
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. SECT. 1-3-3-4,
Adv. Pgs. 70, 71 ..... Pittsburgh ..... Pa
Zeal Ltd., G. H. 4 ..... Lombard Rd. Morden Rd. Merton, London SW19 ..... Eng

ALLOYS
See METALS, ALLOYS & COMPOUNDS

ALPHA COUNTERS
See CHAMBERS—IONIZATION, ALPHA, BETA & GAMMA COUNTERS—RADIATION

ALPHA-PARTICLE SOURCES
See SOURCES—RADIOACTIVE

ALUMINUM
See METALS, ALLOYS & COMPOUNDS

AMMETERS
1. CONTACT
2. >1/2 AMP.
3. MICRO-MICRO
4. MILLI & MICRO

AEG, 1-3-3-4, Adv Pg 113-A ..... Nuetheuer, Frankfurt/Main, Germany
Aerpat Electronics Inc. Seminole Div. 4 ..... Ft. Lauderdale ..... Fla
Assembly Products, Inc. 1-4 ..... 75 Wilson Mills Rd. Chesterland ..... Ohio
Avery Electric, Ltd. 3-3-4 ..... 6 Columbia, Essex ..... Eng
Baldwin Industrial Controls, 4 ..... Dartford, Kent ..... Eng

Bendix Corp, Cincinnati Div. 5 ..... 3320 Warsaw Rd, Cincinnati 5 ..... Ohio
Bristol Co. 4 ..... Box 1790 HRG, Waterbury 20 ..... Conn
Cambridge Instrument Co., Ltd. 3-4 ..... 13 Grosvenor Pl, London SW1, Eng
CENTRAL SCIENTIFIC CO. 4, Adv Pg 112 ..... 1700 Irving Park Rd, Chicago 13 Ill
Columbia Electric Mfg. Co. ..... 4519 Hamilton Ave, Cleveland 14 ..... Ohio
Curtiss-Wright Corp, Princeton Div. 4 ..... Box 116, Princeton ..... NJ
Dr. Vieu KG ..... 20 Bremsbergweg, Bonn ..... Ger
Epic, Inc. 4 ..... 100 Sussex St, New York 36 ..... NY
Escoflex-Argus Co. 4 ..... Box 888, Indianapolis 6 ..... Ind
Frenebel & Vigoureux, Ltd. Acton Lane Wks. 2 ..... Chiswick, London W4 ..... Eng
Fernell Instruments, Ltd. 1 ..... Light Industrial Estate, Tank Rd, Wednesbury ..... Eng
GELMAN INSTRUMENT CO. 4, Adv Pg 233 ..... Box 1119-H, Chelsea ..... Mass
General Dynamics/Electronics, 4 ..... 100 Cadman Rd, Rochester 3 ..... NY
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13 ..... 1 River Rd, Schenectady 5 ..... NY
General Motors, Inc. 2-3-4 ..... Box 1791, Grand Junction ..... Colo
General Radio Co. 3 ..... West Concord ..... Mass
Gpe Electronics Corp. 3 ..... Box 204 La Grange Ill
Helez Inc. 3 ..... 210 E Imperial Hwy, El Segundo ..... Cal
Heath Co. 4 ..... Benton Harbor ..... Mich
Hellpot Div. of Beckman Instruments, Inc. 4 ..... 2500 Harbor Blvd, Fullerton ..... Cal
Hewlett-Packard Co. 2-3-4 ..... 1501 Page Mill Rd, Palo Alto ..... Cal
Hickok Electrical Instrument Co. 2-3-3-4 ..... 10514 Dupont Ave, Cleveland 8 ..... Ohio
INTERNATIONAL INSTRUMENTS, INC. 4, Adv. Pgs. 226, 229 ..... Box 2054, New Haven 15 ..... Conn
INTERTECHNIQUE S.A. 3, Adv Pg 113-H ..... 61 rue Escudier, Boulogne/Billancourt, Seine ..... Fr
IMTUPE DEVELOPMENTS LTD. 3, Adv Pg 74 ..... Bath Rd, Beaulieu, Reading, Berks ..... Eng
KEITHLEY INSTRUMENTS, INC. 1-2-3-4, Adv Pg 194 ..... 12415 Euclid Ave, Cleveland 6 ..... Ohio
Lockheed Aircraft Corp. 1-2-3-4 ..... Box 551, Burbank ..... Cal
Mid-Lanco Electronics, Inc. 3-4 ..... 32 Commerce St, Springfield ..... NJ
Nash & Thompson Ltd. 4 ..... West Hur 5, Tolworth, Surbiton, Surrey ..... Eng
Negretti & Zambra (Canada) Ltd. 3-4 ..... 4 Bennett Rd, Toronto 14 ..... Ont
Olmsted Corp. 3 ..... 2330 Sugar St, Cincinnati 20 ..... Ohio
Pace Electrical Instruments Co Inc 2-3-4 ..... 79-01 16th St, Glendale 27 ..... NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. 4, Adv Pg 107 ..... Eindhoven ..... Neth
Physics Research Labs, Inc. 3-4 ..... Box 555, Hempstead ..... NY
Precision Apparatus Co Inc. 4 ..... 79-01 16th St, Glendale 27 ..... NY
Pye & Co. Ltd., W. G. 4 ..... York St, Cambridge, England
Q. V. S., Inc. 2-3-4 ..... 20 N 15th St, E Orange ..... NJ
RADIATION EQUIP. & ACCESSORIES CORP. 3, Adv. Pg. 3d Cover ..... 363 Scottsville Rd, Lyndonville ..... NY
RADIATION TECHNOLOGY, INC. 3-4, Adv. Pg. 3d Cover ..... 627 Jamison St. NW, Atlanta 18 ..... Ga
RADIO CORP OF AMERICA, ELECTRON TUBE DIV. 4, Adv Pg 23 ..... 415 S 5th St, Harrison ..... NJ
RAWSON ELECTRICAL INSTRUMENT CO. 4, Adv Pg 66 ..... 114 Porter St, Cambridge 40 ..... Mass
RAWYA ELECTRIC INSTRUMENT MFG. LTD. Adv Pg 180 ..... 1007 Sakigahara, Kakahari-machi, Ebaraso-gun, Tokyo ..... Jap
Electro Mecan, 3-4 ..... 130 Wallace St, New Haven 5 ..... Conn
Siemens & Halske AG, 1-2-3-4 ..... Hofmannschanze, 30, Karlsruhe ..... Ger
Simpson Electric Co. Div. Assoc. Gage & Mach Co. 1-4 ..... 3218 W Kinzie St, Chicago 44 Ill
Smith-Flannery, Inc. 2-4 ..... Overlake Ind. Pk, Box 717, Redmond ..... Wash
TERMINAL RADIO INTERNATIONAL LTD. 1-2-3-4, Adv Pg 112-C ..... 240 E 17th St, New York 13 ..... NY
VICTOREEN INSTRUMENT CO. 3, Adv. Pg. 4th Cover ..... 5806-11 Hough Ave, Cleveland 3 ..... Ohio
WELCH SCIENTIFIC CO. 4, Adv Pg 192 ..... 1515 Sedgwick St, Chicago 10 Ill
WESTINGHOUSE ELEC. CORP. INSTRUMENT DEPT. 3-4, Adv. Pgs. 70, 71 ..... Newark ..... NJ

AMPLIFIERS

1. A-C
2. D-C
3. LINEAR
4. LOGARITHMIC
5. MAGNETIC
6. SERVO
7. WIDE-BAND

ABB, 1-2-3-4-5-6, Adv Pg 110-6 ..... Hardstrasse, Frankfurt/Main, Germany
A.E.I. Ltd. 5-6-7 ..... 25 Grosvenor Pl, London SW1, Eng
A. E. I. Ltd. Instrumentation Div. 2 ..... Crown House, Aldwych, London WC2 ..... Eng
Acme Electric Corp. 5 ..... 31 Water St, Cuba ..... NY
Acoustica, Inc. 2-3-4-5 ..... 23616 Telegraph Rd, Detroit ..... Mich
Advanced Technology Labs. 5 ..... 369 Wilmoss Rd, Mountain View ..... Cal
Ambulite Ltd. Castle Wks. 1-2 ..... Dudjeldge, Cheshire ..... Eng
Atlantic Acoustics Corp. 2-3-4 ..... 3434 Chestnut Ave, Hillside 4 ..... NJ
Atlas Electronics Inc. Ventmate Div. 2-3-5-6 ..... Ft. Lauderdale ..... Fla
American Electronic Labs. 2-7 ..... Colmar ..... Pa
American Electronics Inc. 2-6 ..... 1304 E Ross Ave, Fullerton ..... Cal
American Trading Corp. Ltd. (EICO) Electronics, Ltd. 5 ..... 33-01 38th St, Long Island City 6 ..... NY
Amplifier Corp. of America, 1-6 ..... 396 Broadway, New York 13 ..... NY
Ansbacq Ultrasonic Lab. Inc. 7 ..... 56 Grove St, Jamaica Plain 30 ..... Mass
Armstrong Whitworth Equipment, 5 ..... Hawthorne, Glasgow ..... Eng
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, 1-2-3-4-5-6, Adv Pg 112-G ..... Charleroi ..... Belg
Atlas Werke AG, 3 ..... Wolmerdorfer Str, 46/48, Bremen ..... Ger
Ateley Electric, Ltd. 7 ..... 5 Orlandon, Essex ..... Eng
AVEN, INC. 1-3-4, Adv Pg 184 ..... 25-15 Northern Blvd, Bayside 57 ..... NY
BARD-ATOMIC INC. 3, Adv Pg 87 ..... 33 University Rd, Cambridge 38 ..... Mass
Bailey & Dexter Labs. Inc. 7 ..... 89 Franklin St, Fitchburg ..... Mass
Beckman Instruments Inc. Spectro Div. 5-7 ..... 2400 Harbor Blvd, Fullerton ..... Cal
Bell Telephone Mfg. Co., 1-2-3-4-5-6-7 ..... 20 Bellevueste, Hoboken/Antwerp ..... Belg
Beloit Instrument Corp. 1-3-6 ..... 119-01 14th Ave, College Point 56 ..... NY
Bendix Corp Bendix Pacific Div. 1-6-7 ..... 11600 Sherman Way, N Hollywood ..... Cal
Bendix Corp. Cincinnati Div. 2-3-4 ..... 3320 Warsaw Rd, Cincinnati 5 ..... Ohio
Bendix Edcom U.K. Ltd. 7 ..... High Church St, New Romney, Kent ..... Eng
Berkeley Div. Beckman Instruments Inc. 3 ..... 2200 Wright Ave, Richmond ..... Cal
Bethlehem Steel Corp. 3-5-6 ..... 701 E 3rd St, Bethlehem ..... Pa
Bowmar Instrument Corp. 2-4 ..... 2000 Hoffman Rd, Fort Wayne ..... Ind
Brown, Ltd., S. G. 6 ..... Shakespeare St, Watford, Herts ..... Eng
Brush Instrument Div. Clevite Corp. 2 ..... 37th & Perkins, Cleveland 14 ..... Ohio
Burr-Brown Res. Corp. 1-2-3-7 ..... Box 6444, Tucson ..... Ariz
California Tech. Ind. Div. Tusina Inc. 3-6 ..... 1481 Old County Rd, Belmont ..... Cal
Canadian Marconi Co., 7 ..... 2442 Trenton Ave, Montreal 16 ..... Can
Canary Electronics & Instruments, Inc. 1-2 ..... 1333 N Ulen, Tulsa 10 ..... Okla
Clifton Precision Products Co. Inc. 6 ..... 1020 State Rd, Thorndal 1020 ..... Pa
Computron Corp. 6 ..... 400 S Warminster Rd, Hatboro ..... Pa
Computer Systems Inc. 2-3-6-7 ..... Culver Rd, Monmouth Junction ..... NJ
CONRAC RADIATION LABS., INC. 3, Adv Pg 3d Cover ..... 1440 Scottsville Hwy, Ballport ..... NY
Conrac Instruments Ltd. 2-7 ..... Highbury Gr, London N 5 ..... Eng
Curtiss-Wright Corp. Princeton Div. 3 ..... Box 116, Princeton ..... NJ
D.I.S.I. Nuclear Corp. 3 ..... Via A. Boccioni 50, Milan ..... Ital
Dynamic Inc. Control Systems Div. 2 ..... 4455 Mildmar Rd, La Jolla ..... Cal
Designers for Industry, Inc. 1-6 ..... 4041 Fulton Pkwy, Cleve 9 ..... Ohio
DIAMOND POWER SPECIALTY CORP. 7, Adv Pg 1 ..... Box 415, Lancaster ..... Ohio
Dr. Vieu KG ..... 20 Bremsbergweg, Bonn ..... Ger
Dynatron Radio Ltd. 3 ..... St. Peter's Rd, Penn Place, Maidenhead, Berks, Eng
Eckardt AG, J. C. 5 ..... Pempel, 72/82, Stuttgart-Bad Cannstatt ..... Ger
EECO ELECTRONICS LTD. AMERICAN TRADAIR CORP. 2, Adv Pg 209 ..... Southend-on-Sea, Essex ..... Eng
Elcor, Inc. 2-3-7 ..... 7205 W Broad St, Falls Church ..... Va
Electronic Assistance Corp. 6 ..... 30 Bridge Ave, Red Bank ..... NJ
Electronic Associates, Inc. 1-2-3-4-5 ..... Long Branch ..... NJ
Electronic Measurements Co. Inc. 2 ..... Lewis St. & Maple Ave, Emmanuel ..... NJ
Equipment Associes Brazilian Ltda. 3 ..... Box 2054, Rio de Janeiro ..... Braz
Frenebel & Vigoureux, Ltd. Acton Lane Wks. 2 ..... Chiswick, London W4 ..... Eng
Feedback, Ltd. 2-3 ..... 7 The Broadway, Cambourne, Sussex, Eng
Fielden Electronics Ltd. 2 ..... Penna Rd, Wythenshawe, Man 23, Eng
FORBO SCIENTIFIC CO. 2, Adv Pg 224 ..... 820 Lincoln St, Evanston Ill
FRANKLIN ELECTRONICS, INC. 3, Adv Pg 230 ..... E Fourth St, Bridgeport ..... Pa
FRANKLIN SYSTEMS, INC. 1-2-3-4, Adv Pg 230 ..... 2724 Hillsboro Rd, W Palm Beach ..... Fla
Fossil Transformer Co. Inc. 5 ..... 1718 Westfield St, Brooklyn 27 ..... NY
Garrett Corp. 2 ..... 9851 Sepulveda Blvd, Los Angeles 45 ..... Cal
General Dynamics/Electronics, 1-2-3-4 ..... 100 Cadman Rd, Rochester 3 ..... NY
GENERAL ELECTRIC CO. APPARATUS SALES, 1-2-3-4-5-6, Adv. Pgs. 11, 13 ..... 1 River Rd, Schenectady 5 ..... NY
General Magnetics, Inc. 6 ..... 136 Bloomfield Ave, Bloomfield ..... NJ
General Nuclear Corp. 3-4 ..... 2202 S Cypress Ave, Fullerton ..... Cal
General Radio Co. 1-3-7 ..... West Concord ..... Mass
Goodman Industries Ltd. Acton Wks. 1 ..... Wembley, Middx ..... Eng
Gpe Electronics Corp. 3 ..... Box 204 La Grange Ill
GSI-Singer, Inc. 7 ..... Science Pk, Box 60, State College ..... Pa
HAGAN CHEMICALS & CONTROLS, INC. 2-3-4-5-6, Adv Pg 38 ..... Box 1346, Pittsburgh 30 ..... Pa
Helez Inc. 3 ..... 210 E Imperial Hwy, El Segundo ..... Cal
Hallamore Electronics Div. 2 ..... 714 Brookhurst St, Anaheim ..... Cal
HAMNER ELECTRONICS CO. 3, Adv Pg 212 ..... Box 271, Princeton ..... NJ
Harvey Electronics Ltd. 6 ..... 272 Farnborough Rd, Farnborough Hants. ..... Eng
Heath Co. 7 ..... Benton Harbor ..... Mich
Helland Div. Minneapolis-Honeywell Reg. Co. 2-3 ..... 4800 E Evans Ave, Denver 22 ..... Colo
Hermetic Seal Transformer Co. Div. Denver Ind, Inc. 1-2-3-4-6-7 ..... 555 N 5th St, Garland ..... Tex
Hewlett-Packard Co. 1-2-7 ..... 1501 Page Mill Rd, Palo Alto ..... Cal
Honeywell Controls, Ltd. 2-3-5-6-7 ..... Vandenhof Ave, Toronto, Ont Canada
Hoover Electric Co. 6 ..... Port Columbus Aept, Columbus 19 ..... Ohio
HORIBA INSTRUMENTS, INC. 2, Adv Pg 207 ..... Nakamichi-Sanjo, Hakatoyo, Kyoto ..... Jap
Hycon Mfg. Co. 1-2-3-4-5-6-7 ..... 580 Royal Oaks Dr, Monrovia ..... Cal
Industrial Test Equipment Co. 1 ..... 55 E 11th St, New York 3 ..... NY
INSTRUMENT & DEVELOPMENT PROD CO. 2, Adv Pg 204 ..... 253 W 19th Pl, Chicago Ill
Instruments for Industry, 4-7 ..... 161 New South Rd, Hicksville ..... NY
INTERTECHNIQUE S.A. 3-3-4, Adv Pg 113-H ..... 61 rue Escudier, Boulogne/Billancourt, Seine ..... Fr
IMTUPE DEVELOPMENTS LTD. 3-7, Adv Pg 74 ..... Bath Rd, Beaulieu, Reading, Berks ..... Eng
Ital Electronics S.p.A. 1-2-3-7 ..... Via Ignazio Pettinengo 72, Rome ..... Ital
JOHNSON & ASSOCIATES INC., WILLIAM R. 2, Adv Pg 226 ..... Box 418, Montvale Lakes ..... NJ
JOHNSTON LABS, INC., WILLIAM H. 2, Adv Pg 188 ..... 3617 Bonland Ave, Baltimore 15 ..... Md
Jordan Controls Inc. 6 ..... 5656 W Hampton Ave, Milwaukee 9 ..... Wis
K-F Products, Inc. 1-2-3 ..... 3100 E 42nd Ave, Denver ..... Colo
KEARFOTT DIV. GEN. PRECISION, INC. 5-6, Adv Pg 221 ..... 1150 Suffolk Ave, Little Falls ..... NJ
KEITHLEY INSTRUMENTS, INC. 1-2-3, Adv Pg 194 ..... 12415 Euclid Ave, Cleveland 6 ..... Ohio
Keystone Products Co., 3 ..... 204-6 23rd St, Union City ..... NJ
Kin Tel, Div Cohu Electronics Inc., 2-7 ..... 5725 Kearny Villa Rd, San Diego 12 ..... Cal
Kobe Kogyo Corp. 3-7 ..... 2-2 Wakayama-Dori, Higaga-ku, Kobe ..... Jap
Kratos-Hire Corp. 1-6-7 ..... 280 Alex. Ave, Cambridge 39 ..... Mass
Lab. Prof. Dr. E. Berthold, 2-3 ..... 22 Calmbacherstr, Wildbad im Schwarzwald ..... Ger
LABLAIR INC. DIV. SYNALECTRON INC. 1-2, Adv Pg 204 ..... 7404 W Wilson Ave, Chicago 31 Ill
Leach Corp. 1-2-3-4-5-6-7 ..... 18455 Sussex Rd, Compton ..... Cal
Leeds & Northrup Co. 2-3-5-6 ..... 4901 Stenton Ave, Phila 44 ..... Pa
L'Electronique Appliquee, 1-6-3-7 ..... 55 rue de Docteur Finlay, Paris 15 ..... Fr
Lifemaster Div. Gen. Precision, Inc. 2-6 ..... Glendale 1 ..... Cal
Link Div. - Gen. Precision, Inc. 1-2-4 ..... Binghamton ..... NY
Lyons Industries, 1-4-5-6-4 ..... 200 N Foothill Rd, Beverly Hills ..... Cal
Lockheed Aircraft Corp. 1-2-3-4-5-6-7. ..... Box 551, Burbank ..... Cal
Lockheed Aircraft Corp. Georgia Div. 3 ..... 1200 Northside Dr. NW, Atlanta 18 ..... Ga
M. Tec Beech, Inc., 6 ..... 20 Wheeler Ave, Plainsville ..... NY
Magnetic Instruments Co. Inc. 2-6 ..... 627 Commerce St, Thorwood ..... NY
Marconi's Wireless Telegraph Co., Ltd. 2-7 ..... Chelmsford, Essex, England
Melmar Electronics Corp. 1-2-3-5-7 ..... 49 Toledo St, South Farmingdale ..... NY
Miles Electronics Ltd. 2-4 ..... Shenkers Aept, Shenkers, Essex ..... Eng
Miles Hivolt Ltd. 7-8 ..... Old Shenkers Rd, Shenkers-by-Sea, Essex ..... Eng
MINN-HONEYWELL REG CO. PCM, PRODS GROUP, 2-3-4-5-6-7, Adv. Pgs. 72b, 240 ..... Hayes & Wheldon Aves. Phila. 44 ..... Pa
Monitek Inc. Sub. Model Eng. & Mfg. Co. 2-3 ..... 4875 S State St, Salt Lake City ..... Utah
Monsley Co., F. L. 4 ..... 409 N Fair Oaks Ave, Pasadena ..... Cal
Motchnel Instruments Inc. 5 ..... 441 Lexington Ave, New York 17 ..... NY
Nash & Thompson Ltd. 1-3-5 ..... 1355 Wellington St, Ottawa, Canada
NERATOM, N. V., 1-2-3-4-5-7, Adv Pg 112-F ..... Hoofdstraat 38, The Hague ..... Neth
Network Industries Inc. 1 ..... Box 397, Bayonne ..... NJ
New York Air Brake Co. 2-4-5 ..... 230 Park Ave, New York 17 ..... NY
Non-Linear Systems, Inc. 3 ..... Del Mar Airport, Del Mar ..... Cal
NUCLEAR-CHICAGO CORP. 2, Adv. Pgs. 34-37 ..... 340 E Howard Ave, Des Plaines Ill
Nuclear-Electronics Corp. 1-2-3 ..... 2900 N Broad St, Philadelphia 32 ..... Pa
Nuclear Enterprises (GB) Ltd. 3 ..... Sighthill, Edinburgh 11 ..... Scot
NUCLEAR ENTERPRISES LTD. 2, Adv Pg 194 ..... 530 Berry St, Winnipeg 21 ..... Man
NUCLEONIC CORP. OF AMERICA, 2, Adv Pg 202 ..... 195 Dupont St, Brooklyn 22 ..... NY
OAK RIDGE TECHNICAL ENTERPRISES CORP. 2, Adv Pg 229 ..... Box 324, ORNCI, Oak Ridge ..... Tenn
Power Equipment, Ltd. 1-7 ..... Helmerhaye Ind Estate, Redhill, Surrey ..... Eng
Perkins & Co. Ltd., Essex, Electronics Div. 2-6 ..... 2 Pilton, Edinburgh 5 ..... Scot
Philbrick Researches Inc., George A., 1-2-3-6 ..... 127 Clarendon St, Boston 16 ..... Mass
Philco Corp. Govt. & Ind. Gp. 1-2-7 ..... 4700 Wissahickon Ave, Phila 44 ..... Pa
Philips Electronic Instruments, 2 ..... 750 S Fulton Ave, Mt. Vernon ..... NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. 3-4-7, Adv Pg 107 ..... Eindhoven ..... Neth
Photovolt Research Products, 2 ..... 451 N Altadena Dr, Pasadena ..... Cal
Photron Instrument Co. 1-6 ..... 9113 Detroit Ave, Cleve 2 ..... Ohio
Picker X-Ray Corp. 3 ..... 110 Broadway, White Plains ..... NY
Pinsey Nucleonics Ltd. 2-4 ..... Weston Rd, Northampton ..... Eng
Prescision & Co. oHG, 3 ..... Box 2720, Frankfurt/Main 1 ..... Ger
Polyphase Instrument Co. 3 ..... E 4th St, Bridgeport ..... Pa
Pye & Co. Ltd., W. G. 2 ..... York St, Cambridge, England
Quantelyte, 7 ..... Box 383, Woodland Hills ..... Cal
RADIATION COUNTER LABS. INC. 3, Adv. Pgs. 82, 83 ..... 5122 W Grand St, Skokie Ill
RADIATION EQUIP. & ACCESSORIES CORP. 3, Adv. Pg. 3d Cover ..... 363 Scottsville Rd, Lyndonville ..... NY
Radiation Instrument Co. 3 ..... Box 780, Silver Spring ..... Md
RADIATION INSTRUMENT DEVELOPMENT LAB. 3, Adv. Pgs. 216, 220-D ..... 42 E Shark Ave, Northlake Ill
RADIATION TECHNOLOGY, INC. 3, Adv. Pg. 3d Cover ..... 627 Jamison St. NW, Atlanta 18 ..... Ga
Ramage & Miller Inc. 7 ..... 150 S 2nd St, Richmond ..... Cal
Raytheon Co. Microwave & Power Tube Div. Spencer Laboratory, 5 ..... Burlington ..... Mass
Republic Flow Meter Co. 1-6 ..... 2250 Diversey Pkwy, Chicago 47 Ill
Rex Engineering, Inc. 4-6 ..... A & Courtland, Philadelphia 20 ..... Pa
Rochester Instrument Systems Inc. 3 ..... 275 N Union St, Rochester 6 ..... NY
Rustrak Instrument Co. 3 ..... 150 Silver St, Manchester ..... NH
S. A. I. P. 2-3 ..... 50 Rue Gabriel Crie, Malakoff, Seine ..... Fr
Sanborn Co. 1-2-4-6 ..... 175 Wyman St, Waltham 54 ..... Mass
Sangamo Electric Co. 2-6 ..... 13 & Converse Rd, Springfield Ill
Scott, Inc., H. H. 1-7 ..... 111 Powder Mill Rd, Maynard ..... Mass
SELO, 1-3 ..... Via Tordenio 57, Milan ..... Ital
Servomechanisms, Inc. 1-2-3-5-6 ..... 200 N Aviation Blvd, El Segundo ..... Cal
Siemens & Halske AG, 1-2-3-4-5 ..... Hofmannschanze, 30, Karlsruhe ..... Ger
Siemens-Reiniger-Werke AG, 5 ..... Leipziger, 65, Erlangen, Germany
Solartron Electronic Group Ltd. 2 ..... Victoria Rd, Farnborough, Hants ..... Eng
Southern Instruments, Ltd. 2 ..... Frimley Rd, Camberley, Surrey ..... Eng
Spencer-Kennedy Labs., Inc. 7 ..... 1320 Soldiers Field Rd, Boston 35 ..... Mass
Sperry Gyroscope Co. Div. Sperry Rand Corp. 6 ..... Great Neck ..... NY
Standard Winding Co. Div. Ortman Corp. 1-2-4-5-6-7 ..... 44-02 Johnson St, Newburgh ..... NY
Superior Electric Co., The 5 ..... 383 Middle St, Bristol ..... Conn
SYSTEMS ENGINEERING LAB. INC. 2, Adv Pg 198 ..... Box 9145, Fort Lauderdale ..... Fla
TRC, Inc., 1-2-3-4-6 ..... 5 Jewel Way, Hyannis ..... NY
Tinsley Div. Thompson Ramo Wooldridge Inc., 1-2-4-6 ..... 32645 Euclid Ave, Cleveland 17 ..... Ohio
Taylor Instrument Cos. 6 ..... 95 Ames St, Rochester 1 ..... NY
TECHNICAL ASSOCIATES, 3, Adv Pg 235 ..... 140 W Providencia Ave, Burbank ..... Cal

TECHNICAL MEASUREMENT CORP. 3,
Adv Pg 63 ..... 461 Washington Ave. North Haven ..... Conn
Technology Instruments Corp. 1-7 ..... 531 Main St, Acton ..... Mass
Telemetx, Inc. 2-7 ..... Box 880, Beaverton ..... Ore
Teledyne Mfg. Corp. 7 ..... 185 Dixon Ave. Amityville ..... NY
Telecomputing Corp. 1-6 ..... 6125 Aero Dr, San Diego 11 ..... Cal
Telectro Industries Corp., 1-0-1-4-5-6-7 ..... 35-16 37th St, LIC 1 ..... NY
Tennelec Instrument Co. 5 ..... Box 966, Oak Ridge ..... Tenn
TERMINAL RADIO INTERNATIONAL LTD. 2-3-4,
Adv Pg 113-C ..... 240 W 17th St. New York 11 ..... NY
THERMO ELECTRIC CO. INC. 3-6,
Adv Pg 280 ..... Saddle Brook ..... NJ
THOMSON-HOUSTON (CIE. FRANCAISE) 2-3-4-5-6-7,
Adv Pg 112-D ..... 173 Blvd. Haussman, Paris 8 ..... Fr
TOKYO SHIBAURA ELECTRIC CO. LTD. 1-2-3-4-5-6-7, Adv Pg 225 ..... 12 Tsurumi-cho 1-Chome, Chiyoda-ku, Tokyo ..... Jap
Torsion Electronics, Inc. 2-5 ..... Box 70, Lakewood ..... NJ
TRACERLAB, INC. 3,
Adv. Pgs. 124, 112-5 ..... 1601 Trapelo Rd. Waltham 54 ..... Mass
Tran Electronics Co. Inc. 7 ..... Wilton ..... Conn
Transducer Corp. 3 ..... 250 Woodland Ave, Westwood ..... NJ
Trett Electronics, Inc. 1-2-3-5-6-7 ..... 412 Smith St, Rochester 8 ..... NY
Unimat Control Systems, Inc. 1-2-5 ..... 818 Woodley Rd. Dayton 3 ..... Ohio
Vacuric Control Equipment Ltd. 6 ..... 30 Bruswick St. London E C 4 ..... Eng
Vari-L Co. Inc. 5 ..... 207 Greenwich Ave. Stamford ..... Conn
Vaw Inc. 1-2-6 ..... 2801 Walnut St. Garland ..... Tex
Venner Electronics Ltd. 1-7 ..... Kingston By-Pass, New Malden, Surrey ..... Eng
Victoreen, Inc. Electric Products Div. 1-2-3-4-5-6 ..... 1815 Locust St. St. Louis 3 ..... Mo
VICTOREEN INSTRUMENT CO. 3,
Adv. Pg. 4th Cover ..... 5806-11 Hough Ave. Cleveland 3 ..... Ohio
Waltham Electronics Corp. 7 ..... 761 Main St, Waltham ..... Mass
WELCH SCIENTIFIC CO. 3-5, Adv Pg 198 ..... 1515 Sedgwick St. Chicago 10 Ill
Wesconsin Inc. 6 ..... 3805 McCart, Fort Worth ..... Tex
Wheeler Electronic Corp. 5 ..... 150 E Aurora St, Waterbury 20 ..... Conn

ANALOG COMPUTERS
See COMPUTERS--ANALOG

ANALYSIS--ACTIVATION
See SERV. & CONS'LT: ACTIVATION ANALYSIS

ANALYSIS--SPECTROGRAPHIC
See SERV. & CONS'LT: SPECTROGRAPHIC ANALYSIS

ANALYSIS--URANIUM & RADIOISOTOPE
See SERV. & CONS'LT: ANALYSIS, ISOTOPIC
SERV. & CONS'LT: RADIOISOTOPE ANALYSIS

ANALYZERS--COINCIDENCE AND ANTICOINCIDENCE

ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,
Adv Pg 113-D ..... Charleroi ..... Belg
Atomation, Inc. Div. C. W. Reed Co Inc ..... 5860 S Hoover, L A 44 ..... Cal
Bell Telephone Mfg. Co. ..... 23 Berkenrode, Hoboken/Antwerp ..... Belg
Berkeley Associates, Inc ..... 130 E 52nd St, New York 22 ..... NY
California Tech. Ind. Div. Textron Inc. ..... 1401 Old County Rd, Belmont ..... Cal
COSMIC RADIATION LABS. INC.
Adv Pg 3rd Cover ..... 1640 Hartrick Hwy. Bellport ..... NY
D. I. S. I. Nuclear Corp. ..... Via A. Bonfoni 20, Milan ..... Ital
Dr. Vieno KG ..... 20 Brandenburg, Bremen ..... Ger
E-H Research Labs, Inc. ..... 183 Adeline St. Oakland 20 ..... Cal
FRANKLIN SYSTEMS, INC. Adv Pg 224 ..... 2734 Wilshire Rd. W Palm Beach ..... Fla
FRIESEKE & HOEPFNER GMBH,
Adv Pg 113-H ..... Erlangen-Bruck ..... Ger
General Nuclear Corp ..... 1903 S Cypress Ave, Fullerton ..... Cal
HAMNER ELECTRONICS CO. Adv Pg 212 ..... Box 501, Princeton ..... NJ
Heath Co. ..... Benton Harbor ..... Mich
INSTRUMENT & DEVELOPMENT PRODS CO.
Adv Pg 204 ..... 355 W 108th Pl. Chicago Ill
INTERTECHNIQUE S A, Adv Pg 113-G ..... 81 rue Escudier, Boulogne/Billancourt, Seine ..... Fr
ISOTOPE DEVELOPMENTS LTD.
Adv Pg 74 ..... Bath Rd. Brookman, Reading, Berks ..... Eng
Ital Elettronica S.p.A. ..... Via Ignazio Pettinengo 75, Roma ..... Ital
JOHNSTON LABS. INC., WILLIAM H.,
Adv Pg 188 ..... 2517 Rockland Ave. Baltimore 15 ..... Md
Kobe Kogyo Corp. ..... 1-5 Wakayama-Dori, Hyogo-ku, Kobe ..... Jap
Lab. Prof. Dr. R. Berthold ..... 25 Calmbacherstr. Wildbad im Schwarzwald ..... Ger
LANDSVERK ELECTROMETER CO.
Adv Pg 210 ..... 641 Sonora Ave. Glendale 1 ..... Cal
L'Electronique Appliquee ..... 35 rue du Docteur Finlay, Paris 15, Fr
Lockheed Aircraft Corp ..... Box 551, Burbank ..... Cal
NUCLEAR ENTERPRISES LTD.,
Adv Pg 194 ..... 530 Berry St. Winnipeg 21 ..... Man
Nuclear Research Applications Ltd. ..... Bell St, Reigate, Surrey, England
PACKARD INSTRUMENT CO. INC.
Adv. Pgs. 84, 85 ..... Box 428, La Grange Ill
Pazaz Equipment, Ltd. ..... Holmethorpe Ind. Est. Redhill, Surr. Eng
Philips Electronic Instruments ..... 750 S Fulton Ave, Mt. Vernon ..... NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 187 ..... Eindhoven ..... Neth
Pizzey Nucleonics Ltd. ..... Wooden Rd, Wordsmpton ..... Eng
Poenaflex & Co. oHG ..... Box 2708, Frankfurt/Main 1, Germany

RADIATION EQUIP. & ACCESSORIES CORP.
Adv. Pg. 3rd Cover ..... 665 Hamish Rd. Lynbrook ..... NY
RADIATION INSTRUMENT DEVELOPMENT LAB.
Adv. Pgs. 216, 220 A-D ..... 61 E North Ave. Northlake Ill
S. A. I. P. ..... 38 Rue Gabriel Crie, Malakoff, Seine ..... Fr
SELO ..... Via Teodosio 27, Milan ..... Ital
TECHNICAL ASSOCIATES, Adv Pg 225 ..... 140 W Providence Ave. Burbank ..... Cal
TECHNICAL MEASUREMENT CORP.
Adv Pg 63 ..... 461 Washington Ave. North Haven ..... Conn
Telectro Industries Corp. ..... 35-16 37th St, LIC 1 ..... NY
TOKYO SHIBAURA ELECTRIC CO. LTD. 12 Tsurumi-cho 1-Chome, Chiyoda-ku, Adv Pg 225 ..... Tokyo ..... Jap
TRACERLAB, INC. Adv. Pgs. 124, 112-5 ..... 1601 Trapelo Rd. Waltham 54 ..... Mass

ANALYZERS--DEUTERIUM

Atlas Werke AG ..... Wolfmerhauser Str, 441/448, Bremen ..... Ger
N.A.A., Adv Pg 38 ..... Box 752, State College ..... Pa
Precisa & Instruments Corp. ..... 15 Sutter Ave, Brooklyn 33 ..... NY
Sartorius & Halske AG ..... Weissenwechsel, 36, Karlsruhe, Germany
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ANALYZERS--GAS

American Instruments Co. Inc. ..... 8030 Georgia Ave, Silver Spring ..... Md
Atlas Werke AG ..... Wolfmerhauser Str, 441/448, Bremen ..... Ger
BAILEY METER CO. Adv Pg 69 ..... 29801 Euclid Ave. Wickliffe ..... Ohio
Cambridge Instruments Co. Inc. ..... 450 Lexington Ave, New York 17 ..... NY
CARAD CORP. Adv Pg 224 ..... 3381 Jordyne Sara Blvd. Palo Alto ..... Cal
Consolidated Electrodynamics Corp. ..... 360 Sierra Madre Villa, Pasadena ..... Cal
Corning Glass Works, Shielding Radiation Device Engineering Inc. Control Systems Div. ..... Pine Lane W, Caldwell ..... NJ
Dr. Vieno KG ..... 20 Brandenburg, Bremen ..... Ger
Engelhard Industries, Inc. ..... 113 Astor St, Newark 2 ..... NJ
Fischer & Porter Co. ..... 50 Warminster Rd. Warminster ..... Pa
GELMAN INSTRUMENT CO. Adv Pg 223 ..... Box 1184-H, Chelsea ..... Mich
Gow-Mac Instrument Co. ..... 100 Kings Rd. Madison ..... NJ
Honeywell Controls, Ltd. ..... Vanderhoof Ave. Toronto, Ont Canada
HORIBA INSTRUMENTS, INC.
Adv Pg 207 ..... Hakodatedori Souja, Mukoboya, Kyoto ..... Jap
Laboratory Equipment Corp. ..... St. Joseph ..... Mich
Leeds & Northrup Co. ..... 4901 Stenton Ave, Phila 44 ..... Pa
N.A.A., Adv Pg 38 ..... Box 752, State College ..... Pa
National Instrument Labs, Inc. ..... 945 Evers St. NE, Washington ..... DC
Perkin-Elmer Corp. ..... Norwalk ..... Conn
Picker X-Ray Corporation ..... 1070 Mamaroneck Ave. White Plains ..... NY
Pye & Co. Ltd., W. G. ..... York St, Cambridge, England
RADIATION EQUIP. & ACCESSORIES CORP.
Adv. Pg. 3rd Cover ..... 665 Hamish Rd. Lynbrook ..... NY
Roy Co., William ..... 1300 E Mermaid Ln, Phila 18 ..... Pa
ROYAL RESEARCH CORP. Adv Pg 21 ..... 21824 Dublin Blvd. Hayward ..... Cal
S.A.I.P. ..... 38, Rue Gabriel Crie, Malakoff, Seine ..... Fr
Sartorius & Halske AG ..... Weissenwechsel, 36, Karlsruhe, Germany
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Ugine-Aram ..... 101 rue de Sens, Lyon 5e ..... Fr
Union Industrial Equipment Corp ..... Port Chester ..... NY
Vacuum Electronic Corp. ..... Terminal Dr. Plainview ..... NY
Vicwey Engineering Corp. ..... Springfield Ave. Springfield ..... NJ
Water Associates ..... 46 Franklin St. Framingham ..... Mass
Will Corp. ..... Box 1060, Rochester 3 ..... NY

ANALYZERS--PULSE-HEIGHT, MULTICHANNEL

A. E. I. Ltd. Instrumentation Div. ..... Crown House, Aldwych, London WC2 ..... Eng
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,
Adv Pg 113-D ..... Charleroi ..... Belg
Atomation, Inc. Div. C. W. Reed Co Inc. ..... 5860 S Hoover, Los Angeles 44 ..... Cal
B & K Labs. Ltd. ..... 4 Tilney St, Park Ln, London W1 ..... Eng
BAIRD-ATOMIC INC. Adv Pg 57 ..... 33 University Rd. Cambridge 38 ..... Mass
Bell Telephone Mfg. Co. ..... 23 Berkenrode, Hoboken/Antwerp ..... Belg
Beckman Corp. Continental Div. ..... 2120 Wasson Rd. Cincinnati 6 ..... Ohio
California Tech. Ind. Div. Textron Inc. ..... 1401 Old County Rd. Belmont ..... Cal
D. I. S. I. Nuclear Corp. ..... Via A. Bonfoni 20, Milan ..... Ital
Dynatron Radio Ltd. ..... St. Peter's Rd. Parsons Plant, Maidenhead, Berks, Eng
Equipment Americana Brasileira Ltda. ..... Box 2384, Rio de Janeiro ..... Braz
FRANKLIN ELECTRONICS, INC.
Adv Pg 220 ..... E Fourth St. Bridgeport ..... Pa
FRIESEKE & HOEPFNER GMBH,
Adv Pg 113-H ..... Erlangen-Bruck ..... Ger
General Applied Science Labs. Inc. ..... Merrick & Stewart Ave, Westbury ..... NY
Gyax Electronics Corp. ..... Box 184 La Grange Ill
HAMNER ELECTRONICS CO. Adv Pg 212 ..... Box 501, Princeton ..... NJ
INTERTECHNIQUE S A, Adv Pg 113-G ..... 81 rue Escudier, Boulogne/Billancourt, Seine ..... Fr
Ital Elettronica S.p.A. ..... Via Ignazio Pettinengo 75, Roma ..... Ital
KAMAN NUCLEAR, Adv. Pgs. 188, 191 ..... Garden of the Gods Rd. Colo Springs ..... Colo
Kobe Kogyo Corp. ..... 1-5 Wakayama-Dori, Hyogo-ku, Kobe ..... Jap
Lab. Prof. Dr. R. Berthold ..... 25 Calmbacherstr. Wildbad im Schwarzwald ..... Ger
L'Electronique Appliquee ..... 35 rue du Docteur Finaly, Paris 15, Fr
Lockheed Aircraft Corp ..... Box 551, Burbank ..... Cal
Marshall of Cambridge Electronics Ltd. ..... The Aerodrome, Cambridge, England
Miles Hivolt Ltd ..... Old Shoreham Rd, Hove-on-Sea, Sussex ..... Eng
NUCLEAR DATA INC., Adv. Pgs. 98, 99 ..... 2023 W Berthne Hwy. Madison ..... Wis

Nuclear Enterprises (GB) Ltd. ..... Sighthill, Edinburgh 11 ..... Scot
NUCLEAR ENTERPRISES LTD.,
Adv Pg 194 ..... 530 Berry St. Winnipeg 21 ..... Man
NUCLEAR MEASUREMENTS CORP.,
Adv Pg 237 ..... 2460 N Arlington Ave. Indpls. 18 ..... Ind
Pazaz Equipment, Ltd. ..... Holmethorpe Ind Estate, Redhill, Surrey ..... Eng
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 187 ..... Eindhoven ..... Neth
Picker X-Ray Corp ..... 25 S Broadway, White Plains ..... NY
Pizzey Nucleonics Ltd. ..... Wooden Rd, Northampton, England
Poenaflex & Co. oHG ..... Box 2708, Frankfurt/Main 1, Germany
RADIATION COUNTER LABS. INC.
Adv. Pgs. 82, 83 ..... 5122 N Gross St. Skokie Ill
RADIATION EQUIP. & ACCESSORIES CORP.
Adv. Pg. 3rd Cover ..... 665 Hamish Rd. Lynbrook ..... NY
RADIATION INSTRUMENT DEVELOPMENT LAB.
Adv. Pgs. 216, 220A-D ..... 61 E North Ave. Northlake Ill
RADIATION TECHNOLOGY, INC.
Adv. Pg. 3rd Cover ..... 657 Antone St. NW, Atlanta 18 ..... Ga
Raytheon Co. Industrial Components Div. ..... 55 Chapel St, Newton ..... Mass
S. A. I. P. ..... 38 Rue Gabriel Crie, Malakoff, Seine ..... Fr
SELO ..... Via Teodosio 27, Milan ..... Ital
Sartorius & Halske AG ..... Weissenwechsel, 36, Karlsruhe, Germany
TECHNICAL ASSOCIATES, Adv Pg 225 ..... 140 W Providence Ave. Burbank ..... Cal
TECHNICAL MEASUREMENT CORP.
Adv Pg 63 ..... 461 Washington Ave. North Haven ..... Conn
TERMINAL RADIO INTERNATIONAL LTD.
Adv Pg 113-C ..... 240 W 17th St. New York 11 ..... NY
TOKYO SHIBAURA ELECTRIC CO. LTD. 12 Tsurumi-cho 1-Chome, Chiyoda-ku, Adv Pg 225 ..... Tokyo ..... Jap
VICTOREEN INSTRUMENT CO.,
Adv. Pg. 4th Cover ..... 5806-11 Hough Ave. Cleveland 3 ..... Ohio

ANALYZERS--SPECTROCHEMICAL

A. E. I. Ltd. ..... 22 Grosvenor Pl. London SW1, Eng
American Instrument Co. Inc. ..... 8030 Georgia Ave. Silver Spring ..... Md
Applied Research Labs, Inc. ..... Box 1710, Glendale 5 ..... Cal
Bausch & Lomb, Inc. ..... 63002 Bausch St, Rochester 3 ..... NY
CENTRAL SCIENTIFIC CO. Adv Pg 112 ..... 1700 Irving Park Rd. Chicago 13 Ill
Consolidated Electrodynamics Corp. ..... 360 Sierra Madre Villa, Pasadena ..... Cal
Curtis Nuclear Corp. ..... 1865 W 135th St. Gardena ..... Cal
Engis Equipment Co. ..... 451 S Dearborn St. Chicago Ill
GELMAN INSTRUMENT CO. Adv Pg 223 ..... Box 1184-H, Chelsea ..... Mich
Ital Elettronica S.p.A. ..... Via Ignazio Pettinengo 75, Roma ..... Ital
LAMB-AIR INC. SUB. DYNALECTRON INC.
Adv Pg 204 ..... 7466 N Milwa Ave. Chicago 31 Ill
Perkin-Elmer Corp. ..... Norwalk ..... Conn
TOKYO SHIBAURA ELECTRIC CO. LTD. 12 Tsurumi-cho 1-Chome, Chiyoda-ku, Adv Pg 225 ..... Tokyo ..... Jap

ANALYZERS--TIME-OF-FLIGHT

Computer Equipment Corp. ..... 11612 Olympic Blvd, Los Angeles 64 ..... Cal
D. I. S. I. Nuclear Corp. ..... Via A. Bonfoni 20, Milan ..... Ital
Designers for Industry, Inc. ..... 4041 Fulton Pkwy, Cleveland 9 ..... Ohio
Elcl Electronics Ltd. ..... Hayes, Middlesex ..... Eng
INTERTECHNIQUE S A, Adv Pg 113-G ..... 81 rue Escudier, Boulogne/Billancourt, Seine ..... Fr
L'Electronique Appliquee ..... 35 rue du Docteur Finlay, Paris 15, Fr
Lockheed Aircraft Corp ..... Box 551, Burbank ..... Cal
New York Air Brake Co ..... 230 Park Ave, New York 17 ..... NY
RADIATION COUNTER LABS. INC.
Adv. Pgs. 82, 83 ..... 5122 N Gross St. Skokie Ill
RADIATION INSTRUMENT DEVELOPMENT LAB.
Adv. Pgs. 216, 220A-D ..... 61 E North Ave. Northlake Ill
TECHNICAL MEASUREMENT CORP.
Adv Pg 63 ..... 461 Washington Ave. North Haven ..... Conn
Telectro Industries Corp. ..... 35-16 37th St, LIC 1 ..... NY
VICTOREEN INSTRUMENT CO.,
Adv. Pg. 4th Cover ..... 5806-11 Hough Ave. Cleveland 3 ..... Ohio

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ARCHITECT-ENGINEER SERVICES
See SERV. & CONS'LT: ARCHITECT-ENGINEER

AREA MONITORS--RADIOACTIVITY
See Under MONITORS--RADIATION

ARGON
See Under GASES

AUTOCLAVES

ALLIED ENGINEERING & PRODUCTION CORP.,
Adv Pg 240 ..... 3421 Blending Ave. Alameda ..... Cal
American Instrument Co. Inc. ..... 8030 Georgia Ave. Silver Spring ..... Md
AUTOCLAVE ENGINEERS, INC.,
Adv Pg 209 ..... 2930 W 22nd St. Erie ..... Pa
AVERY & SAUL CO., Adv Pg 73 ..... 115 Rindge Ave. Cambridge ..... Mass
Babcock & Wilcox Ltd. ..... 209 Cannon St, London EC4 1, England
Bethlehem Steel Corp. ..... 701 E 3rd St, Bethlehem ..... Pa
CENTRAL SCIENTIFIC CO. Adv Pg 112 ..... 1700 Irving Park Rd. Chicago 13 Ill

Chicago Bridge & Iron Co.	332 S Michigan Ave, Chicago 4	Ill
POSTER WHEELER CORP. Adv Pg 130	666 5th Ave, New York 19	NY
Power & Co. Ltd., W. J.	Hamill Hill, Sandiacre, Nottingham, England	
Gallenkamp & Co. Ltd., A.	Sun St, London, E. C. 2, England	
General Eng. Co. (Radcliffe) Ltd.	Bury Rd, Radcliffe, Lancs	Eng
Graver Tank & Mfg. Co. Div. Union Tank Car Co.	39 E Wacker Dr, Chicago 1	Ill
Gummiwerke Elektrode AG	Lippstadt 1, Obelmesen Hdd.	Ger
Harvey & Co. (London) Ltd., G. A.	Woolwich Rd, London, SE7	Eng
Horton Steel Works, Ltd.	16 Adelaide St, W, Toronto	Ont
Kelley & Co., G. G.	97 Taylor St, Boston 22	Mass
Knopp Mills, Inc.	23-15 Borden Ave, LIC 1	NY
Lesher Boiler & Engineering Corp.	2301 S Wolcott Ave, Chicago 8	Ill
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
NATIONAL ANNEALING BOX CO. Box 184	Box 338, Washington	Pa
National Forge Co	Irvine, Warren City	Pa
Nooter Corp.	1404 S 3rd St, St. Louis 66	Mo
Nuclear Metals, Inc.	Box 333 Concord	Mass
PHOENIX-ZECHERONE AG, Adv Pg 27	Augsburg-Thyssen-Str 1, Duesseldorf	Ger
Pittsburgh Piping & Equipment Co.	100 40th St, Pittsburgh	Pa
RUHRSTAHL AG, Adv Pg 113-E	Bochumer Str. 38, Witten-Annen	Ger
SANDUSKY FOUNDRY & MACHINE CO. Adv Pg 30	W Market St, Sandusky	Ohio
Societe Pivot-Pathoret	240 Rue Saint-Honore, Paris 1	Fr
Thompson, Ltd., John	Wolverhampton, England	
VARI, Adv Pg 120	2001 E Colorado, Pasadena	Cal

AUXILIARY POWER
See MOTOR-GENERATOR SETS

BADGES—FILM
See DOSIMETERS—RADIATION

BALANCES—WEIGHING
1. AUTOMATIC
2. RECORDING
3. REMOTE OPERATING

Ainsworth & Sons, Inc., Wm. 1-2-3	8151 Lowman St, Denver 5	Colo
American Instrument Co. Inc. 3	8030 Georgia Ave, Silver Spring	Md
Detroit Corp. 1-3	2200 6th Ave, Pittsburgh 19	Pa
Computyne Corp. 1-2-3	400 S Warminster Rd, Hatboro	Pa
Gallenkamp & Co. Ltd., A. 1	Sun St, London E C 2	Eng
Mettler Instrument Corp. 1-2-3	Box 165, Princeton	NJ
Sohnes Scientific Div. Schneider & Co. 1-2-3	76 Cliff St, New York 38	NY
Sartorius & Reddle AG, 1-2	Weissbrunnerstr. 64, Gottingen	Ger
Spectral Electronics Corp., 1	1704 S Del Mar Ave, San Gabriel	Cal
Stevens-Amet Co. 1-2-3	Grayslake	Ill
TOKYO SHIBAURA ELECTRIC CO. LTD. 2, Adv Pg 235	12 Tsuruhe-cho 1-Chome, Chiyoda-ku, Tokyo	Jap
Westronics Inc. 3	3005 McCart, Fort Worth	Tex

BATHS—CONSTANT-TEMPERATURE

ALLIED ENGINEERING & PRODUCTION CORP. Adv Pg 302	3401 Blending Ave, Alameda	Cal
American Instrument Co, Inc.	8030 Georgia Ave, Silver Spring	Md
Associated Testing Labs, Inc.	136 Rte. 46, Wayne	NJ
BAR-RAY PRODUCTS, INC. Adv Pg 13	389 38th St, Brooklyn 32	NY
Dynatech Corp.	400 Massachusetts Ave, Cambridge 39	Mass
Gallenkamp & Co. Ltd., A.	Sun St, London, E. C. 2, England	
Gordon Co., Chas. A.	600 W 80 St, Chicago 20	Ill
Hellmuth Electronics Div.	714 Brookhurst St, Anaheim	Cal
JENSEN & ASSOCIATES, INC., WILLIAM R. Adv Pg 236	Box 455, Hacienda Lakes	NJ
Kidd Scientific Instruments Corp.	Box 1108, El Cajon	Cal
Lenk & Hertkop Co.	4000 Stanton Ave, Phila 44	Pa
Modern Lab. Equipment Co. Inc.	1011 1st Ave, New York 22	NY
Nesbeng Thermometer Co. Inc.	104 Livingston St, Brooklyn 2	NY
Sohnes Scientific Div. Schneider & Co.	76 Cliff St, New York 38	NY
TOKYO SHIBAURA ELECTRIC CO. LTD. Adv Pg 235	12 Tsuruhe-cho 1-Chome, Chiyoda-ku, Tokyo	Jap
Victory Engineering Corp.	Springfield Ave, Springfield	NJ
Webber Mfg. Co. Inc.	Box 517, Indianapolis 6	Ind
Will Corp.	Box 1600, Rochester 3	NY
York Corp.	Grantley Rd, York	Pa

BATTERIES—ELECTROCHEMICAL

E.E.L. Ltd.	30 Grosvenor Pl, London SW1, Eng	
Hoppe Battery Co. Div. Sprag, Inc.	Prospect	Ill
Eagle-Picher Co.	American Bldg, Cincinnati 1	Ohio
Exide Corp. Scientific Instrument Div.	18 W 46th St, New York 36	NY
RADIO CORP. OF AMERICA, ELECTRON TUBE DIV. Adv Pg 23	415 S 5th St, Harrison	NJ
Ray-O-Vac Co. Div. Electrochemical Products Co	Madison	Wis
Telecomputing Corp.	8125 Aero Dr, San Diego 11	Cal
TOKYO SHIBAURA ELECTRIC CO. LTD. Adv Pg 235	12 Tsuruhe-cho 1-Chome, Chiyoda-ku, Tokyo	Jap
Yardney Electric Corp.	40 Leonard St, New York 13	NY

BATTERIES—NUCLEAR

Nash & Thompson Ltd.	Hoch Rise 5, Tolworth, Surbiton, Surrey	Eng
Nuclear Research Associates, Inc.	20-15 Bunten Pl, Ave, LIC 1	NY
Radiation Applications, Inc.	20-40 97th St, Long Island City 1	NY
ROYAL RESEARCH CORP. Adv Pg 21	11024 Dublin Blvd, Hayward	Cal
U. S. NUCLEAR CORP., Adv Pg 127	801 N Lake St, Box 2002, Burbank	Cal

BEARINGS—BALL & ROLLER

Allied Plastics Supply Corp.	75 Cliff St, New York 38	NY
Allison Div. Gen. Motors Corp.	Box 894, Indianapolis	Ind
Alloys Unlimited, Inc.	22-01 42nd Ave, LIC 1	NY
E. M. C. Instrumentation, Ltd.	Western Rd, Bracknell, Berks, Eng	
EX-CELLO CORP. ATOMICS DIV. Adv. Pgs. 8, 9	1200 Oakman Blvd, Detroit 23	Mich
Fafnir Bearing Co.	37 South Ave, New Britain	Conn
Federal-Mogul-Bower Bearings, Inc.	11001 Shoemaker Ave, Detroit 13	Mich
Imley Industrial Supply Co. Ltd.	5 Windmill St, London, W1	Eng
Kayden Engineering Corp.	Muskegon	Mich
Marathon Bearings, Inc.	Box 7305, Philadelphia 1	Pa
Miniature Precision Bearings, Inc.	Precision Pk, Keene	NH
New Departure Div. GMC	300 N Main St, Bristol	Conn
Split Ballbearing Div. MPB, Inc.	Lebanon	NH
Timken Roller Bearing Co.	1835 Dueber Ave, Canton 6	Ohio

BELLOWS & EXPANSION JOINTS

APM Corp.	41 Hewett St, Englewood	NJ
Aeroquip Corp.	300 S East Ave, Jackson	Mich
Aeroquip-Marlon Div.	11354 W Exposition Blvd, L. A. 66	Cal
Aviza Corp.	Box 180, Freeport	Ill
Babcock & Wilcox Ltd.	209 Euston Rd, London NW 1, England	
Badger Mfg. Co.	280 Bent St, Cambridge	Mass
Bellab Corp.	Daytona Beach	Fla
Bronson Corp. Inc.	700 Liberty Ave, Union	NJ
Calmi Ltd., Francis	Africa House, Kingsway, London WC 2, Eng	
Chicago Gasket Co.	2271 W North Ave, Chicago 39	Ill
Cook Electric Co, Cook Tank Co.	6601 W Grimes St, Morton Grove	Ill
Cott-Reynolds Engineering Co.	1120 Main St, Stamford	Conn
Federal-Mogul-Bower Bearings, Inc	11001 Shoemaker Ave, Detroit 13	Mich
Flexonics Corp.	1315 S 3rd Ave, Maywood	Ill
Flight Bellowing Inc.	Box 1781, Baltimore 3	Md
HYDROTHERM CORP. Adv Pg 139	7220 Calhoun Cooper Ave, N. Hollywood	Cal
Metal Bellows Corp.	804 Miss Lane Wellesley	Mass
Metflex Ltd.	Willow Ln, Mitcham, Surrey	Eng
Metzenflex Corp.	Woodland Rd, Rowland	NJ
Schaetzlein-Pelton Controls Co. Pelton Sylphon Div.	Box 400, Knoxville 1	Tenn
Sellmann Engineering Co. Inc.	7500 W Devon Ave, Chicago	Ill
Senior Inc.	Warwick Industrial Pk, Pawtucket 2	RI
Standard-Thomson Corp.	102 Grove St, Waltham 54	Mass
Thompson, Ltd., John	Wolverhampton, England	
Tube Turns Div. Chemetron Corp.	236 E Broadway, Louisville 1	Ky
United Flexible Metallic Tubing (Canada) Ltd.	Box 145, Richmond Hill, Ont Canada	
Valco Company Ltd.	Guildford, Surrey, Eng.	
Yarnall-Waring Co.	102 E Mermaid La, Phila 18	Pa
Zallea Brothers	Taylor & Lucas Sts, Wilmington	Del

BERYLLIUM, BERYLLIUM OXIDE
See METALS, ALLOYS & COMPOUNDS

BETA COUNTERS
See CHAMBERS—IONIZATION, ALPHA, BETA & GAMMA
COUNTERS—RADIATION

BETA GAGES
See GAGES—THICKNESS OR DENSITY, RADIOACTIVITY

BETA-RAY SOURCES
See ACCELERATORS
SOURCES—RADIOACTIVE

BETATRONS
See Under ACCELERATORS

BINARY SCALERS
See SCALERS—BINARY
SCALING TUBES—DECADE

BLOWERS
See FANS & BLOWERS

BOOKS—TECHNICAL

ACADEMIC PRESS INC. Adv Pg 79	111 5th Ave, New York 3	NY
Addison-Wesley Publishing Co, Inc.	Reading	Mass
Allied Radio Corp.	100 N Western Ave, Chicago 80	Ill
Atomic Laboratories, Inc.	3006 Claremont Ave, Berkeley 5	Cal
Blakiston Div. of McGraw-Hill Book Co.	330 W 42nd St, New York 36	NY
Bureau of National Affairs, Inc.	1231 24th St, NW, Washington 7	DC
Chemical of United Nuclear Activities	234 W 50th St, New York 1	NY
Columbia University Press	2960 Broadway, New York 27	NY
Commerce Clearing House	4025 W Peterson Ave, Chicago 46	Ill
Computer Systems Inc.	Culver Rd, Monmouth Junction	NJ
Consultants Bureau Enterprises, Ltd.	227 W 17th St, New York 11	NY
Eagle Equipment Co.	401 S Dearborn St, Chicago	Ill
Hilger & Watts, Ltd.	98 St. Pancras Way, London N W 1	Eng
Interscience Publishers, Inc.	250 5th Ave, New York	NY
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
Louisiana State University Press	Baton Rouge 3	La
Lyle Corp.	1404 San Mateo SE, Albuquerque	NM
McGRAW-HILL BOOK CO. INC. Adv Pg 218	330 W 42nd St, New York 36	NY
Microwave Corp.	West Salem	Wis
National Agency for Int'l Pub. Inc.	201 2nd Ave, New York 23	NY
Oxford University Press	417 5th Ave, New York 16	NY
Pergamon Press, Inc.	122 E 55th St, New York 22	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 107	Eindhoven	Neth
Philosophical Library	15 E 40th St, New York 16	NY
Plenum Press, Inc.	227 W 17th St, New York 11	NY
Prentice-Hall, Inc.	Route 9W, Englewood Cliffs	NJ
RCA SERVICE CO. NUCLEAR & SCIENTIFIC SERVICES Adv Pg 31	Cherry Hill, Delaware Tp. Camden 8	NJ
RADIO CORP. OF AMERICA, ELECTRON TUBE DIV. Adv Pg 23	415 S 5th St, Harrison	NJ
Reader's Microprint Corp.	100 5th Ave, New York	NY
Reinhold Publishing Corp.	430 Park Ave, New York 22	NY
Rees & Co. Inc., Howard W.	2201 E 46th St, Indianapolis 5	Ind
Scientific Equipment Co.	Box 19005, Indianapolis 19	Ind
Simmons-Boardman Publishing Co.	30 Church St, New York 7	NY
Technical Dictionaries Co.	Box 146, New York 33	NY
TERMINAL RADIO INTERNATIONAL LTD. Adv Pg 113-C	240 W 17th St, New York 11	NY
University of California Press	Berkeley 4	Cal
University of Chicago Press	5750 Ellis Ave, Chicago 37	Ill
Van Nostrand Co, Inc., D.	120 Alexander St, Princeton	NJ
Wiley & Sons Inc., John	440 4th Ave, New York 16	NY

BORAL
See METALS, ALLOYS & COMPOUNDS

BORESCOPES

Bausch & Lomb, Inc.	40102 Bausch St, Rochester 2	NY
Bolens & Fils, Ets. J.	14 bis, Rue Denis Papin, Poissy (Seine)	Fr
DIAMOND POWER SPECIALTY CORP. Adv Pg 7	Box 415, Lancaster	Ohio
Engelhard Industries, Inc.	113 Astor St, Newark 5	NJ
Falk & Co. Ltd., M.	Rawlins House, Reigate Surrey	Eng
LEMKE INSTRUMENT CO. Adv Pg 238	2840 Comwallis St, Philadelphia 3	Pa
Lumin Engineering Corp.	52 Clark Ave, Hardwicksburn	Mass
Optical Works Ltd.	30 The Mall, Ealing W5, England	
S. O. M.	155 bd Davout, Paris 20	Fr
Wallin Optical Systems Inc.	10023 Venture Blvd, Tarzana	Cal

BORON
See METALS, ALLOYS & COMPOUNDS

BOXES
See DRY BOXES

BRAKES—MAGNETIC

AEG, Adv Pg 113-A	Hedderstr, Frankfurt/Main, Germany	
A.E.I. Ltd.	30 Grosvenor Pl, London SW1, Eng	
Bowmar Instrument Corp.	8000 Huffman Rd, Fort Wayne	Ind
Clark Controller Co.	1146 E 152 St, Cleveland 10	Ohio
Cutler-Hammer, Inc.	412 N 12th St, Milwaukee 1	Wis
Garrett Corp.	9851 Sepulveda Blvd, Los Angeles 45	Cal
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 12	1 River Rd, Schenectady 5	NY
General Electric Co. Ltd. of England	Erith, Kent, England	
Hodge Controls Div. Ordnance Corp.	105 River Rd, Cos Cob	Conn
KEARFOTT DIV. GEN. PRECISION, INC. Adv Pg 221	1150 Bellside Ave, Little Falls	NJ
Velcon Engineering Corp.	320 Carnegie Ave, Kenilworth	NJ
Wagner Electric Co.	6400 Plymouth, St. Louis 30	Mo

BRAZING EQUIPMENT
See Under FABRICATING EQUIPMENT

BRICK—RADIATION-SHIELDING
See Under SHIELDING—RADIATION

BUBBLE TRAYS
See SCRUBBERS—GAS

BURETTES—AUTOMATIC
See Also LABORATORY APPARATUS

American Instrument Co. Inc.	8030 Georgia Ave, Silver Spring	Md
Beckler & Co	Pressbaurer Str. 104, Braunschweig	Ger
Corning Glass Works, Shielding Radiation	Corning	NY
Dr. Vieu KG	30 Hannoverweg, Bonn	Ger
Gallenkamp & Co. Ltd., A.	Sun St, London, E. C. 2, England	

Fidi Scientific Instrument Corp.	Box 1168, El Cajon	Cal
Fye & Co. Ltd., W. G.	York St, Cambridge	Eng
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	465 Merrick Rd, Lynbrook	NY
Scientific Glass Apparatus Co., Inc.	100 Lakewood Terr, Bloomfield	NJ
Will Corp.	Box 1008, Rochester 3	NY

BURST-SLUG DETECTORS
See DETECTORS—BURST-SLUG

CABINETS—DRYING

Acme Electric Heating Corp.	50 Bowling St, Roxbury 19	Mass
Andalite, Ltd. Castle Wks.	Stalybridge, Cheshire, England	
Air Control, Inc.	480 Hoboken Ave, Hoboken	Pa
Air & Refrigeration Corp.	480 Medium Ave, New York 17	NY
Bethlehem Corp	215 W 2nd St, Bethlehem	Pa
CONTROLLED ATMOSPHERE ENCLOSURES MFG CO		
Adv Pg 38	Leonard Air Base, Harrison	Fla
Delta Design, Inc.	3189 Adams Ave, San Diego 16	Cal
Electricite Mon Ste d'	11 rue Petit, Clichy Seine	Fr
Gallenkamp & Co, Ltd., A.	Sun St, London, E. C. 2, England	
General Vacuum Corp.	51 Hicks Ave, Medford	Mass
Kewanee Mfg. Co.	1060 S Center St, Adrian	Mich
Lydon Bros. Inc.	88 Zabriskie St, Hackensack	NJ
Medical Lab. Equipment Co. Inc.	102 Ar Ave, New York 30	NY
New York Air Brake Co	230 Park Ave, New York 17	NY
Nutsberg Thermometer Co. Inc.	156 Livingston St, Brooklyn 1	NY
Research Specialties Co.	500 S Garrard Blvd, Richmond	Cal
Trinity Equipment Corp.	Box 1276, Cortland	NY
ULTRASONIC INDUSTRIES, INC.		
Adv Pg 64	Assoc Co. Engrs. Hill, Philadelphia	PA
Will Corp.	Box 1008, Rochester 3	NY

CABINETS—INSTRUMENT
See CONSOLES, CABINETS & PANELS

CABLE—ELECTRIC, RADIATION-RESISTANT
See WIRE & CABLE—RADIATION-RESISTANT

CALANDRIAS—REACTOR

Babcock & Wilcox Ltd.	209 Euston Rd, London NW 1	Eng
Bethlehem Corp	215 W 2nd St, Bethlehem	Pa
Bethlehem Steel Corp.	701 E 3rd St, Bethlehem	Pa
Canadian General Electric Co Ltd.	197 Park St, Peterborough, Ont.	Can
Canadian Westinghouse Co, Ltd.	Box 510, Hamilton, Ontario, Canada	
Consolidated Western Steel Div, U. S. Steel Corp.	Box 5016, Term. Ann. L A 54	Cal
EX-CELLO CORP. ATOMICS DIV.		
Adv. Pgs. 8, 9	1200 Oakman Blvd. Detroit 32	Mich
FOSTER WHEELER CORP. Adv Pg 130	666 5th Ave. New York 19	NY
Leader Iron Works, Inc.	2130 N Jasper St, Decatur	Ill
New York Shipbuilding Corp.	Camden 1	NJ
Oswald Engineer Ltd.	Box 4015 Term A, Toronto	Can
PACIFIC COAST ENGINEERING CO.		
Adv Pg 200	Denver E, Alameda	Cal
Steyrerstrasse-Gmo-Fonder AG	Steyrerstrasse Hauptst. 30, Vienna 7	Aus
TOKYO SHIBAURA ELECTRIC CO. LTD.	12 Tsunko-cho 1-Chome, Chiyoda-ku,	
Adv Pg 225	Tokyo	Jap
UNITED NUCLEAR CORP., Adv Pg 31	302 Westchester Ave, New Haven 4	Conn

CAMERAS—RECORDING

Alcoma Instrument Corp.	600 E Shiawassee St, Lansing	Mich
Beckman & Whitley, Inc.	930 E San Carlos Ave, San Carlos	Cal
Canadian Applied Research Div. A.V. Inc Can. Ltd.	Box 6004, Term. A, Toronto	Can
EDGERTON, GERMESHAUSEN & GRIER, INC.		
Adv Pg 195	160 Brookline Ave, Boston 15	Mass
Kinnon Corp. Scientific Instrument Div.	18 W 40th St, New York 18	NY
Fairchild Camera & Instr. Corp.		
Defense Prod. Div.	300 Robbins Ln, Syosset	NY
Fairchild Camera & Instr. Corp.		
Ind. Prod. Div.	464 Midland Ave, Yonkers	NY
Fremont Electric, Inc	Industrial Pk. 81, Plainview	NY
Hudson & Co. Inc., William J.	Box 646, West Caldwell	NJ
Hewlett-Packard Co.	1501 Page Mill Rd, Palo Alto	Cal
Hycon Mfg. Co.	700 Royal Oaks Dr, Monrovia	Cal
ITT LABS. COMPONENTS DIV.,		
Adv Pg 207	3700 E Pontiac St, Fort Wayne	Ind
Lockheed Aircraft Corp.	Box 504 Burbank	Cal
Miles Hivelt Ltd	Old Shoreham Rd, Hassocks-by-Sea, Sussex	Eng
Southern Instruments, Ltd.	Frimley Rd, Camberley, Surrey, England	
Tekonsis, Inc.	Box 600, Beaverton	Ore
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 113-C	240 W 17th St. New York 11	NY
TOKYO SHIBAURA ELECTRIC CO. LTD.	12 Tsunko-cho 1-Chome, Chiyoda-ku,	
Adv Pg 225	Tokyo	Jap
Wallace & Tiernan, Inc.	25 Main St, Belleville 9	NJ
Walkie Optical Systems Inc.	10800 Venture Blvd, Toronto	Cal

CAMERAS—X-RAY
See RADIOGRAPHIC EQUIPMENT—X-RAY

CANNED PUMPS
See PUMPS

CAPACITORS
NOTE: Various types of capacitors are not indicated in this listing. Contact manufacturer for specific type(s) desired.

ABB, Adv Pg 113-A	Hessheim, Frankfurt/Main, Germany	
A.E.I. Ltd.	30 Grosvenor Pl, London SW1, Eng	
Aerovox Corp.	740 Belleville Ave, New Bedford	Mass
Allen-Bradley Co.	136 W Greenfield Ave, Milwaukee 4	Wis
ALLIS-CHALMERS MFG. CO.,		
Adv. Pgs. 109-111	933 S 70th St, Milwaukee 1	Wis
Alsthom, Nuclear Div.	38, Ave. Kléber, Paris 16, France	
AMP Inc.	Eisenhower Blvd, Harrisburg	Pa
Astron Corp.	255 Grant Ave, East Newark	NJ
Axel Electronics, Inc.	130-20 Jamaica Ave, Jamaica 18	NY
Balco Capacitors Div. Balco Res. Labs.	49-53 Edison Pl, Newark 5	NJ
Bell Telephone Mfg. Co.	33 Berkenrode, Hoboken/Antwerp	Belg
Bendix Corp. Cincinnati Div.	3130 Vernon Rd. Cincinnati 8	Ohio
Beach Corp., Robert	60-55 Crescent St, Long Island City 1	NY
Cambridge Thermionic Corp.	446 Concord Ave, Cambridge 38	Mass
Cornell-Dubilier Electronics Div. Fed. Pac. Elec. Co.	50 Paris St, Newark 7	NJ
Corning Glass Works, Heating Radiation Electron Products Div Meadland Industries	Corning	NY
Electronic Associates, Inc.	450 N Halstead St, Pasadena	Cal
Erie Resistor Corp.	Long Branch	NJ
GENERAL ELECTRIC CO. APPARATUS SALES,	644 W 12th St, Erie	Pa
Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
General Radio Co.	West Concord	Mass
Good-All Electric Mfg. Co.	113 W 1st St, Ogallala	Neb
Helmer Mfg. Co.	5710 Bowcroft St, Los Angeles 16	Cal
Hughes Semiconductor Div.	500 Superior Ave, Newport Beach	Cal
Hunt (Capacitors) Ltd., A. H.	Nuneaton Valley, Garrett Ln, Wandsworth, London SW18, England	
Jennings Radio Mfg. Corp.	970 McLaughlin Ave, San Jose 8	Cal
Lerlumbe SA	48 ave de Grandson, Yverdon	Switz
L'Electronique Appliquee	25 rue de Docteur Finlay, Paris 15	Fr
Line Material Industries, McGraw-Edison Co.	Milwaukee 1	Wis
Mallory Mfg. Co., James	150 Exchange St, Malden	Mass
Multiband Instruments Inc.	463 Lexington Ave, New York 17	NY
Murata Seisakusho, Ltd.	1, Tenjinyama-machi, Hisanita, Higashiyama-ku Yamashina, Kyoto	Jap
Nuclear Research Associates, Inc.	30-15 Hunter Pl, Ave, LIC 1	NY
Oberlin Mfg. Co.	3001 Howard St, Skokie	Ill
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 197	Eindhoven	Neth
Physics Research Labs. Inc.	Box 555, Hampstead	NY
Pradio Co. Inc.	3014 Broadway, Santa Monica	Cal
Quartz & Silica, S. A.	8 rue d' Anjou, Paris	Fr
Sangamo Electric Co.	13 & Converse St, Springfield	Ill
Sprague Electric Co.	180 Front St, Chicopee	Mass
Sprague Electric Co.	Marshall St, North Adams	Mass
Stackpole Carbon Co.	St. Marys	Pa
Standard Pressed Steel Co.	Box 1352, Jenkintown	Pa
Standard Tel. & Cables Ltd.	29 Glasshouse Yd, London EC 1	Eng
Stevens-Arnold Inc.	7 Elkins St, South Boston 27	Mass
Sullivan, Ltd.	56-60 Uxbridge Rd, London W6, England	
Telecomputing Corp.	8125 Aero Dr, San Diego 11	Cal
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 113-C	240 W 17th St. New York 11	NY
Texas Instruments Incorporated, Components Div.	Box 5012, Dallas 22	Tex
TOKYO SHIBAURA ELECTRIC CO. LTD.	12 Tsunko-cho 1-Chome, Chiyoda-ku,	
Adv Pg 225	Tokyo	Jap

CAPACITORS—HIGH-VOLTAGE, LOW-INDUCTANCE

ABB, Adv Pg 113-A	Hessheim, Frankfurt/Main, Germany	
ALLIS-CHALMERS MFG. CO.,		
Adv. Pgs. 109-111	933 S 70th St. Milwaukee	Wis
Alsthom, Nuclear Div.	38, Ave. Kléber, Paris 16, France	
AMP Inc.	Eisenhower Blvd, Harrisburg	Pa
Astron Corp.	255 Grant Ave, East Newark	NJ
Axel Electronics, Inc.	130-20 Jamaica Ave, Jamaica 18	NY
Balco Capacitors Div. Balco Res. Labs.	49-53 Edison Pl, Newark 5	NJ
Bendix Corp. Scientific Div.	Sidney	NY
Beach Corp., Robert	60-55 Crescent St, Long Island City 1	NY
Cornell-Dubilier Electronics Div. Fed. Pac. Elec. Co.	50 Paris St, Newark 7	NJ
Cosmic Technological Corp.	1050 Connecticut Ave, Washington 6	DC
Electronic Associates, Inc.	Long Branch	NJ
Epic, Inc.	150 Nassau St, New York 38	NY
Erie Resistor Corp.	644 W 12th St, Erie	Pa
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
Good-All Electric Mfg. Co.	113 W 1st St. Ogallala	Neb
Hunt (Capacitors) Ltd., A. H.	Nuneaton Valley, Garrett Ln, Wandsworth London SW18, England	
Jennings Radio Mfg. Corp.	970 McLaughlin Ave, San Jose 8	Cal
Lapp Insulator Co. Inc.	169 Sumner St, Lefferg	NY
Line Material Industries, McGraw-Edison Co.	Milwaukee 1	Wis
Miles Hivelt Ltd	Old Shoreham Rd, Hassocks-by-Sea, Sussex	Eng
Mallory Mfg. Co., James	150 Exchange St, Malden	Mass
Philips Electronic Instruments	700 S Palmer Ave, Mt. Vernon	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 197	Eindhoven	Neth
Sprague Electric Co.	Marshall St, North Adams	Mass
Standard Tel. & Cables Ltd.	29 Glasshouse Yd, London EC 1	Eng
Telecomputing Corp.	8125 Aero Dr, San Diego 11	Cal
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 113-C	240 W 17th St. New York 11	NY
TOKYO SHIBAURA ELECTRIC CO. LTD.	12 Tsunko-cho 1-Chome, Chiyoda-ku,	
Adv Pg 225	Tokyo	Jap

CAPSULES—IRRADIATION TESTING
See Also SERV. & CONS'LT: NR-PILE TEST DESIGN

AMERICAN NUCLEAR CORP. Adv Pg 199	Box 420, Oak Ridge	Tenn
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV.,		
Adv. Pgs. 118, 219	Box 93, Ottawa, Ont	Can
Bostwick Associates, Inc	130 E 42nd St, New York 39	NY
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),		
Adv. Pgs. 217, 219, 221	1000 Vanco St. Apollo	Pa
NUCLEAR UTILITY SERVICES, INC.,		
Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
Oswald Engineer Ltd.	Box 4015 Term A, Toronto	Can
ROYAL RESEARCH CORP. Adv Pg 27	11024 Dublin Blvd. Hayward	Cal
S.E.R.A.L. Adv Pg 112-J	1091 chaussee d'Alsemberg, Beusele 18	Belg
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Ad B. Clemenceau, Courbevoie, Seine	Fr
Tracerlab Reactor Monitoring Center	2030 Wright Ave, Richmond	Cal
UNITED NUCLEAR CORP., Adv Pg 31	302 Westchester Ave. New Haven 4	Conn
U. S. NUCLEAR CORP., Adv Pg 127	801 N Lake St. Box 3023, Burbank	Cal
Vickers Armstrong (S Marston) Ltd.	Barlaston, Stoke	Eng

CARBON
See GRAPHITE

CARBON DIOXIDE
See Under GASES

CARBON—RADIOACTIVE
See ISOTOPES—RADIOACTIVE

CASKS—SHIELDED, SPENT-FUEL SHIPPING & STORAGE
See SHIELDING—RADIATION

CASTINGS
1. IRON
2. STEEL
3. NONFERROUS

A.E.I. Ltd. 1-3	30 Grosvenor Pl, London SW1, Eng	
Allegheny Ludlum Steel Corp. 3	Oliver Bldg, Pittsburgh 22	Pa
ALLEN ENGINEERING & PRODUCTION CORP., 3		
Adv Pg 242	3421 Bleeding Ave. Alameda	Cal
ALLIS-CHALMERS MFG. CO. 1-3		
Adv. Pgs. 109-111	933 S 70th St. Milwaukee 1	Wis
Allegh Unlimited, Inc. 3	32-01 43rd Ave, LIC 1	NY
Alpha Metals, Inc. 3	600 Water St, Jersey City 4	NJ
Aluminum Co. of America, 3	1501 Alcoa Bldg, Pittsburgh 19	Pa
American Cast Iron Pipe Co. 1-3	Box 2028, Birmingham 2	Ala
Babcock & Wilcox Ltd. 1-3-3	209 Euston Rd, London NW 1, England	
Baldwin-Lima-Hamilton Corp. 3-3	Chestnut St, Philadelphia 42	Pa
Balmans Armstrong & Rolling Mills, Inc. 3	222 Bainbrge Ave, Brooklyn 1	NY
Bethlehem Corp. 1	215 W 2nd St, Bethlehem	Pa
Bethlehem Steel Corp. 1-3-3	701 E 3rd St, Bethlehem	Pa
Bunny-Floyd Co. 3	611 Marion Rd. Columbus 7	Ohio
Devonsure & Co., Ltd. 3	Great Dover St, London SE1, England	
English Steel Corp. Ltd. Sheer Den Mind	Sheffield 6, Yorkshire, England	
Escher Wyss Ltd. 1-3	Zurich	Switz
Fermi-Birmingham Co. Inc. 1	Ancona	Conn
General Electric Co. Foundry Dept 1-3-3	1 River Rd. Schenectady 5	NY
Green & Co., W. A. Section Chemical Div. 3	Erwin	Tenn
Gutehoffnungshutte Vereinigte AG, 1	Lippenfeld 1, Oberhausen Rhld.	Ger
Hadfields Ltd. 3	Vulcan Rd. Sheffield 9	Eng
Hayes Foundry Co. Div. of BCC, 3	170 Park Ave, New York 17	NY
Hess-X, Inc. 3	Brewster	NY
Hills-McCanna Co. 3	400 Maple Ave. Carpentersville	Ill
Huntington Alloy Prods Div. Int. Nickel Co. Inc. 3	Huntington 17	W Va
Kayser Elliott & Co. Ltd. 3	Carlisle Steel Wks, Sheffield, 4,	Eng
Knapp Construction Co., Andrew, 3	30-15 Broden Ave. Long Island City 1	NY
Knapp Mills Inc. 3	22-15 Broden Ave, LIC	NY
Lead Fabricators, Inc. 3	55 Belgrove Dr, Kearny	NJ
Lincoln Foundry Corp. 1	3085 E 49th St, Los Angeles	Cal
Lorraine-Escaut, 3	7 Rond-Point Bugeaud, Paris 16e	Fr
MESSANTY ROYAL CORP. 1		
Adv Pg 63	Pfd Stock Ave. New Rochelle	NY
NATIONAL LEAD CO. 3, Adv. Pgs. 60, 61	111 Broadway, New York 6	NY
North Arnold Steel Foundry Ltd. 3	Bedlington, W Northum, Northland	
Nuclear Metals, Inc. 1-3-3	Box 1520 Concord	Mass
Oregon Metallurgical Corp. 3	Box 484, Albany	Ore
Oswald Engineer Ltd. 1-2-3	Box 4015 Term A, Toronto	Can
Overpelt Lommel & de Corphalie SA, cie des Metaux 3	54 rue des Fabriques, Brussels	Belg

Pacific Valves, Inc, 1-0-0 — 2001 Walnut Ave, Long Beach — Cal
Precision Compare Corp, 1 — 4000 S E Harney Dr, Portland 6 — Ore
Reliance Incorporated 3 — 2230-2232 Adams Ave, Phila 36 — Pa
SHRISTAWS, AB, 1-2, Ads Pg 112-E — Brackaner Str. 38, Wien-Auer — Aus
SANDUSKY FOUNDRY & MACHINE CO. 3-2,
Ads Pg 33 — W Barker St, Sandusky — Ohio
Schoeller-Bleckmann Steel Wire Ind. 1 — 3 Wiedpentnerstr, Vienna 1 — Aus
Steel-Alloys Inc, 3 — 29 N Macquesten Pkwy, Mt. Vernon — NY
Sperry Gyroscope Co. Div, Sperry Rand Corp, 3 — Great Neck — NY
STEARNS-ROGER MFG. CO. Ads Pg 32 — Box 5888, Denver 37 — Colo
Steiner Ben, Ltd. 1-3-3 — Winterthur — Swit
Sylvania Elec Prods Inc, Chem & Met Div. 3 — Towanda — Pa
TRG, Inc, 1-3 — 5 Aerial Way, Syosset — NY
Thompson, Ltd., Ind, 1 — Wolverhampton — Eng
Titanium Metals Corp. of America, 3 — 233 Broadway, New York 7 — NY
Tosi, S.p.a., Pomm, 1-3-3 — Legnano, Milan — Ital
U. S. PIPE & FOUNDRY CO. STEEL & TUBES DIV., 1-3-3,
Ads. Pgs. 34, 35 — E Pearl St, Burlington — NJ
VAN-LEAGUE CHEMICAL CO. 3,
Ads Pg 261 — 116 Broad St, New York 4 — NY
Wisconsin Foundry Co, 3-3 — Lincoln Ave, Waukesha — Wis
WESTINGHOUSE ELEC. CORP. MATERIALS MFG. 3-3,
Ads. Pgs. 70, 71 — Blairsville — Pa
Wisconsin Centrifugal Foundry, Inc, 3-3 — 905 E St, Paul Ave, Waukesha — Wis

CELLS—HOT

See HOT LABORATORIES

CENTRIFUGES

Bellaire-Linde-Hamilton Corp. — Dept H 3, Philadelphia 40 — Pa
Clarion Scientific Instruments Inc. — 861 Devon St, Kearny — NJ
Dorr-Oliver Inc. — 77 Havemeyer Ln, Stamford — Conn
Gallenkamp & Co. Ltd., A. — Sun St, London, E. C. 2, England
Gardenough Pumps Ltd. — 133 Jermyn St, London SW1, England
Gesellschaftsgerätebau Steinbach AG — Lippstadt 1, Obstbaum 8b4, — Ger
International Equipment Co. — 1284 Soldiers Field Rd, Boston 35 — Mass
Nesbeck Thermometer Co. Inc. — 236 Livingston St, Brooklyn 1 — NY
Pfaudler Co. Div. Pfaudler Permutit Inc. — 1000 West Ave, Rochester 3 — NY
Philipp-Drosten, Inc. — Box 597, Arcadia — Cal
ROYAL RESEARCH CORP. Ads Pg 21 — 11024 Dublin Blvd, Hayward — Cal

CERAMICS

See Also FUEL ELEMENTS
METALS, ALLOYS & COMPOUNDS
REFRACTORIES

Aerojet Associates Inc. — 10400 Aviation Blvd, Los Angeles 45 — Cal
Allen Div. U. S. Stoneware Co. — Box 110, Orrville — Ohio
ALLIED ENGINEERING & PRODUCTION CORP.,
Ads Pg 243 — 3427 Blending Ave, Alameda — Cal
Ceramics Lava Corp. — Manufacturers Rd, Chattanooga 5 — Tenn
Ceramics International Div, BAA, — Box 2000, Canoga Park — Cal
CR Corp — Cottage Pl, Minneola — NY
Carborundum Co. Refractories Div. — Perth Amboy — NJ
Carborundum Co. R & D Dir — New Prods. Dr. MRG, Niagara Falls — NY
Curtiss-Wright Corp. Research Div. — Quehanna — Pa
Degussa — Box 2000, Frankfurt/Main — Ger
DREESEN PRODUCTS, INC. Ads Pg 208 — Great Barrington — Mass
Electric Boat Div. Gen. Dynamics Corp. — Industrial Services Dept, 004, Groton — Conn
Electro-Ceramics, Inc. — 1046 S 2 W, Salt Lake City 15 — Utah
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.
Ads Pg 202 — Box 608, San Diego 12 — Cal
Gibbs & Co., W. E. Division Chemical Div. — Ervin — Tenn
Hommel Co. O. — Box 475, Pittsburgh 30 — Pa
Ipsen Industries Inc. — Box 604, Rockford — Ill
Jellinite Mfg. Corp — 207 Warren Ave, Stirling — NJ
Job-O-Fairbrick — Brisbek, Ro. Hash. — Ger
Laboratory Equipment Corp. — St. Joseph — Mich
L'Electronique Appliquee — 55 rue de Dormoy Paisley, Paris 15, Fr
Linde Engineering Labs. — Box 949, Gene Valley — Cal
Lockheed Aircraft Corp — Box 551, Burbank — Cal
Morbey, Inc, A. D. — 156 Broadway, New York 38 — NY
Morse Ltd. — Chobham, Woking, Surrey — Eng
National Beryllia Corp. — 1st & Haskell Ave, Haskell — NJ
NATIONAL LEAD CO. Ads. Pgs. 60, 61 — 111 Broadway, New York 6 — NY
Norton Co. — 1 New Bond St, Worcester 6 — Mass
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),
Ads. Pgs. 217, 219, 221 — 1800 Warm St, Apollo — Pa
Nuclear Metals, Inc. — Box 332 Concord — Mass
PYRO-ELECTRIC, INC. Ads Pg 7 — Hadley Rd, Bellmore — Ind
Raytheon Co. Microwave & Power Tube Div. Spencer Laboratory — Burlington — Mass
SAINT-GOBAIN NUCLEAIRE, Ads Pg 229 — 23 Ed S. Clemenceau, Courbevoie, Seine — Fr
Sassenberg Ceramics, Inc. — Box 107, Sassenberg — Pa
Star Porcelain Co. — 21 Middlesed Ave, Trenton — NJ
Telecomputing Corp. — 5135 Ante Dr, San Diego 11 — Cal
TELEFLEX INC. Ads Pg 240 — Church Rd, North Wales — Pa
TECHNICAL CORP. OF AMERICA,
Ads Pg 136 — 20204-0 Solon Rd, Solon 39 — Ohio

CHAMBERS—ENVIRONMENTAL TEST

Ace Engineering & Machine Co. Inc. — Tremlaton Rd, Huntingtown Valley — Pa
Acme Electric Heating Corp. — 69 Sewing St, Sudbury 10 — Mass
Aerco Div Aerojet-General Corp — 610 N Citrus Ave, Covina — Cal
Air Control, Inc. — 4101 Rodeach Ave, Rodeach — Pa
ALLIED ENGINEERING & PRODUCTION CORP.,
Ads Pg 243 — 3427 Blending Ave, Alameda — Cal
American Instrument Co, Inc. — 8030 Georgia Ave, Silver Spring — Md
Associated Testing Labs, Inc. — 134 Rte. 46, Wayne — NJ
Baldwin-Lima-Hamilton Corp. — Dept. H 3, Philadelphia 42 — Pa
Bethlehem Corp — 253 W 2nd St, Bethlehem — Pa
Cambro — Box 6864, Jacksonville 7 — Fla
Chicago Bridge & Iron Co. — 332 S Michigan Ave, Chicago 4 — Ill
Cook Electric Co. Cook Tech Ctr. — 8401 W Oakton St, Morton Grove — Ill
Custom Scientific Instruments Inc. — 861 Devon St, Kearny — NJ
Delta Design, Inc. — 3180 Adams Ave, San Diego 16 — Cal
Electric Boat Div. Gen. Dynamics Corp. — Industrial Services Dept. 004, Groton — Conn
Environmental Equipment Co. — 309 Linden St, Brooklyn 27 — NY
Gallenkamp & Co. Ltd., A. — Sun St, London, E. C. 2, England
General Dynamics /Fort Worth — Box 748 Fort Worth 1 — Tex
General Eng. Co. (Radcliffe) Ltd. — Bury Rd, Radcliffe, Lancs. — Eng
Gerver Tank & Mfg. Co. Div. Union Tank Car Co. — 55 E Washer St, Chicago 1 — Ill
Hamas Steel Works, Ltd. — 55 Adelaide St. W, Toronto — Ont
Kinney Vacuum Div. The K. T. Air Suite Co. — 3850 Washington St, Boston 30 — Mass
Lockheed Aircraft Corp — Box 551, Burbank — Cal
Modern Lab. Equipment Co., Inc. — 1811 1st Ave, New York 28 — NY
NBC EQUIPMENT CORP. NATIONAL RESEARCH CORP.
Ads Pg 229 — 60 Charlemont St, Newton Highlands 61 — Mass
NATIONAL ANNEALING BOX CO.
Ads Pg 104 — Box 520, Washington — Pa
National Research Corp — 70 Memorial Dr, Cambridge 42 — Mass
New York Air Brake Co — 230 Park Ave, New York 17 — NY
NEWBROOK MACHINE CORP., Ads Pg 93 — Silver Creek — NY
Pittsburgh Des Moines Steel Co. — Neville Island, Pittsburgh 25 — Pa
Plasmadyne Corp — 3950 S Main St, Santa Ana — Cal
RADIATION TECHNOLOGY, INC.
Ads. Pg. 3rd Cover — 457 Antone St. NW, Atlanta 18 — Ga
Research Inc. — Box 6104, Edina Sta, Minpls 56 — Minn
ROYAL RESEARCH CORP. Ads Pg 21 — 11024 Dublin Blvd, Hayward — Cal
STOKES CORP., F. J. Ads Pg 241 — 5500 Tabor Rd, Philadelphia 20 — Pa
Tapco Div. Thompson Ramo Wooldridge Inc. — 23600 Euclid Ave, Cleveland 17 — Ohio
Temperature Engineering Corp. — 1050 Tempco Blvd, Bourne — Ill
Thermal-Dynamics Corp. — Lebanon — NH
Vacuum Research (Cambridge) Ltd. — Cambridge, Bridge St, Cambridge, Eng
Webber Mfg. Co. Inc. — Box 257, Indianapolis 6 — Ind
Willamette Iron & Steel Co. — 100 NW Front Ave, Portland — Ore
Tank Corp. — Greatley Rd, York — Pa

CHAMBERS—FISSION

AMPEREX ELECTRONIC CORP.,
Ads Pg 65 — 230 Duffy Ave, Hicksville — NY
D.L.S.I. Nuclear Corp. — Via A. Boccini 30, Milan — Ital
GENERAL ELECTRIC CO. APPARATUS SALES,
Ads. Pgs. 11, 13 — 1 River Rd, Schenectady 5 — NY
HAMMER ELECTRONICS CO. Ads Pg 213 — Box 331, Princeton — NJ
LIONEL ELECTRONIC LABS.
Ads Pg 210 — 1226 Flushing Ave, Brooklyn 37 — NY
Lockheed Aircraft Corp — Box 551, Burbank — Cal
Miles Hivelt Ltd — Old Sherehem Rd, Sherehem-by-Sea, Essex — Eng
NUCLEAR ENTERPRISES LTD.,
Ads Pg 194 — 330 Bury St, Winnipeg 27 — Man
Plessey Nucleonics Ltd. — Vendee Rd, Northampton, England
Pernickler & Co. oHG — Box 3708, Frankfurt/Main 1, Germany
RADIOTECHNIQUE, LA, Ads Pg 113-E — 130 rue Ledru-Rollin, Paris 11e — Fr
Senior-Ension Electronic Components, Inc. — 3140 Hamilton Ave, Cleveland 14 — Ohio
20th Century Electronics Ltd. — King Henry's Dr, New Addington Croydon, Surrey — Eng
WESTINGHOUSE ELECTRIC CORP. ELECTRONIC TUBE DIV.
Ads Pg 184 — Box 284, Elmira — NY

CHAMBERS—IONIZATION, ALPHA, BETA & GAMMA

ABS, Ads Pg 113-A — Rastatten, Frankfurt/Main, Germany
AMERICAN NUCLEAR CORP. Ads Pg 198 — Box 428, Oak Ridge — Tenn
AMPEREX ELECTRONIC CORP.,
Ads Pg 65 — 230 Duffy Ave, Hicksville — NY
Applied Physics Corp. — 2724 S Peck Rd, Monrovia — Cal
Ceramaire, Inc. Div. C. W. Reed Co Inc. — 6600 S Hoover, Los Angeles 44 — Cal
ATOMIC ACCESSORIES, INC. Ads Pg 206 — 437 W Merrick Rd, Valley Stream — NY
Baldwin Industrial Controls — Dartford, Kent, England
Berwick Associates, Inc — 150 E 52nd St, New York 22 — NY
Cook Electric Co. Cook Tech Ctr. — 8401 W Oakton St, Morton Grove — Ill
D.L.S.I. Nuclear Corp. — Via A. Boccini 30, Milan — Ital
FRIESEKE & HOEPFNER GMBH,
Ads Pg 113-H — Erlangen-Bruck — Ger
General Dynamics /Fort Worth — Box 748 Fort Worth 1 — Tex
GENERAL ELECTRIC CO. APPARATUS SALES,
Ads. Pgs. 11, 13 — 1 River Rd, Schenectady 5 — NY
HAMMER ELECTRONICS CO. Ads Pg 213 — Box 331, Princeton — NJ
Hitachi, Ltd — 1-4-chome Marunouchi, Chiyoda-ku, Tokyo — Jap
INTERTECHNIQUE S A, Ads Pg 113-G — 81 rue Escudier, Boulogne/Billancourt, Seine — Fr
Ind Electronics S.p.A. — Via Ignazio Pettinengo 72, Roma — Ital
JOHNSON & ASSOCIATES, INC., WILLIAM S.,
Ads Pg 226 — Box 413, Manasquan Lakes — NJ
JOHNSTON LABS, INC., WILLIAM H.,
Ads Pg 188 — 3617 Woodland Ave, Baltimore 15 — Md
Kobe Kogyo Corp. — 1-8 Wakayama-Dori, Hyogo-ku, Kobe — Jap
LANDSVERK ELECTROMETER CO.
Ads Pg 210 — 640 Sonora Ave, Glendale 1 — Cal
Linder Roller & Engineering Corp. — 3201 S Walnut Ave, Chicago 5 — Ill
L'Electronique Appliquee — 55 rue de Dormoy Paisley, Paris 15, Fr
LIONEL ELECTRONIC LABS.
Ads Pg 210 — 1226 Flushing Ave, Brooklyn 37 — NY
Lockheed Aircraft Corp — Box 551, Burbank — Cal
MELLON, INC., GEORGE T.
Ads Pg 182 — 132 Nassau St, New York 38 — NY
Miles Hivelt Ltd — Old Sherehem Rd, Sherehem-by-Sea, Essex — Eng
NERATON, N. V., Ads Pg 113-F — Sparkstede 38, The Hague — Neth
Nucleonics Laboratory — Tinley Park — Ill
NUCLEAR-CHICAGO CORP.,
Ads. Pgs. 54-57 — 345 E Howard Ave, Des Plaines — Ill
NUCLEAR CORP OF AMERICA, INST & CON DIV,
Ads Pg 94 — 2 Richmond Pl, Denville — NJ
Nuclear-Electronics Corp. — 3301 N Broad St, Philadelphia 32 — Pa
NUCLEAR ENTERPRISES LTD.,
Ads Pg 194 — 330 Bury St, Winnipeg 27 — Man
NUCLEONIC CORP. OF AMERICA,
Ads Pg 202 — 195 Wagner St, Brooklyn 31 — NY
OAK RIDGE TECHNICAL ENTERPRISES CORP.
Ads Pg 239 — Box 324, MSOCI, Oak Ridge — Tenn
Olmsted Corp. — 2530 Bogen St, Cincinnati 14 — Ohio
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Ads Pg 187 — Eindhoven — Neth
Plessey Nucleonics Ltd. — Vendee Rd, Northampton, England
Pernickler & Co. oHG — Box 3708, Frankfurt/Main 1, Germany
RADIATION COUNTER LABS. INC.
Ads. Pgs. 52, 53 — 5122 W Grove St, Skokie — Ill
RADIATION EQUIP. & ACCESSORIES CORP.
Ads. Pg. 3rd Cover — 443 Sentrick Rd, Lyndonvil — NY
RADIATION INSTRUMENT DEVELOPMENT LAB.
Ads. Pgs. 214, 2204-D — 61 N Sixth Ave, Hawthorne — Ill
RADIATION TECHNOLOGY, INC.
Ads. Pg. 3rd Cover — 457 Antone St. NW, Atlanta 18 — Ga
Senior-Ension Electronic Components, Inc. — 3140 Hamilton Ave, Cleveland 14 — Ohio
Riggs Nucleonics Corp. — 135 W Magnolia Blvd, Burbank — Cal
S. A. I. P. — 38 Rue Gabriel Crie, Malakoff, Seine — Fr
Siemens & Halske AG — Hochstrasse, 80, Karlsruhe — Ger
SOLID STATE RADIATIONS, INC.
Ads Pg 211 — 2201 S Carmelina Ave, LA 64 — Cal
TECHNICAL ASSOCIATES, Ads Pg 230 — 140 W Providencia Ave, Burbank — Cal
TERMINAL RADIO INTERNATIONAL LTD.
Ads Pg 113-C — 240 W 17th St, New York 11 — NY
TOKYO SHIBAURA ELECTRIC CO. LTD.
Ads Pg 229 — 72 Tsuruhamachi 1-Chome, Chiyoda-ku, Tokyo — Jap
TRACERLAB, INC. Ads. Pgs. 134, 113-I — 1601 Trapelo Rd, Waltham 54 — Mass
20th Century Electronics Ltd. — King Henry's Dr, New Addington Croydon, Surrey — Eng
U. S. NUCLEAR CORP., Ads Pg 137 — 609 N Lake St, Box 3022, Burbank — Cal
Vacuum Ind. Applications, Ltd. — Wetherton Rd, Widnes, Lancashire — Scot
VICTOREEN INSTRUMENT CO.,
Ads. Pg. 4th Cover — 5806-11 Hough Ave, Cleveland 3 — Ohio
WESTINGHOUSE ELECTRIC CORP. ELECTRONIC TUBE DIV.
Ads Pg 184 — Box 284, Elmira — NY
X-Ray Dept, General Electric Co. — 4855 Electric Ave, Milwaukee — Wis

CHAMBERS—IONIZATION, GEIGER

D.L.S.I. Nuclear Corp. — Via A. Boccini 30, Milan — Ital
Dr. Vinz KG — 20 Rosenbergweg, Bonn — Ger
GENERAL ELECTRIC CO. APPARATUS SALES,
Ads. Pgs. 11, 13 — 1 River Rd, Schenectady 5 — NY
INTERTECHNIQUE S A, Ads Pg 113-G — 81 rue Escudier, Boulogne/Billancourt, Seine — Fr
L'Electronique Appliquee — 55 rue de Dormoy Paisley, Paris 15, Fr
LIONEL ELECTRONIC LABS.
Ads Pg 210 — 1226 Flushing Ave, Brooklyn 37 — NY
Miles Hivelt Ltd — Old Sherehem Rd, Sherehem-by-Sea, Essex — Eng
NUCLEAR ENTERPRISES LTD.,
Ads Pg 194 — 330 Bury St, Winnipeg 27 — Man
Pernickler & Co. oHG — Box 3708, Frankfurt/Main 1, Germany
SELO — Via Tendesio 81, Milan — Ital
TERMINAL RADIO INTERNATIONAL LTD.
Ads Pg 113-C — 240 W 17th St, New York 11 — NY
TRACERLAB, INC. Ads. Pgs. 134, 113-I — 1601 Trapelo Rd, Waltham 54 — Mass

CHAMBERS—IONIZATION, NEUTRON

ABS, Ads Pg 113-A — Rastatten, Frankfurt/Main, Germany
AMPEREX ELECTRONIC CORP.,
Ads Pg 65 — 230 Duffy Ave, Hicksville — NY
Ceramics International Div. BAA Inc. — Box 2000, Canoga Park — Cal
Berwick Associates, Inc — 150 E 52nd St, New York 22 — NY
D.L.S.I. Nuclear Corp. — Via A. Boccini 30, Milan — Ital
GENERAL ELECTRIC CO. APPARATUS SALES,
Ads. Pgs. 11, 13 — 1 River Rd, Schenectady 5 — NY
General Nuclear Corp — 1310 S Cypress Ave, Fullerton — Cal
HAMMER ELECTRONICS CO. Ads Pg 213 — Box 331, Princeton — NJ
Hitachi, Ltd — 1-4-chome Marunouchi, Chiyoda-ku, Tokyo — Jap
Kobe Kogyo Corp. — 1-8 Wakayama-Dori, Hyogo-ku, Kobe — Jap
L'Electronique Appliquee — 55 rue de Dormoy Paisley, Paris 15, Fr
LIONEL ELECTRONIC LABS.
Ads Pg 210 — 1226 Flushing Ave, Brooklyn 37 — NY

Lockheed Aircraft Corp	Box 551, Burbank	Cal
Miles Hivolt Ltd	Old Shoreham Rd, Hove-by-Sea, Sussex	Eng
Neuweiler Laboratory	Tinley Park	Ill
NUCLEAR CORP OF AMERICA, DIST & CONV DIV.		
Adv Pg 94	2 Richmond Pl, Danville	NJ
NUCLEAR ENTERPRISES LTD.,		
Adv Pg 194	550 Berry St, Winnipeg 21	Man
NUCLEONIC CORP. OF AMERICA,		
Adv Pg 200	196 Degraw St, Brooklyn 31	NY
Pinsey Nucleonics Ltd.	Wootton Rd, Northampton, England	
Pressler & Co. oHG	Box 2708, Frankfurt/Main 1, Germany	
RADIATION COUNTER LABS. INC.		
Adv. Pgs. 82, 83	5722 W Grove St, Skokie	Ill
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	665 Hewlett Rd, Lynbrook	NY
Reactor Controls Co.	Box 4271, Oak Ridge	Tenn
Reeves-Hoffman Electronic Components, Inc.	7240 Hamilton Ave, Cleveland 14	Ohio
SOLID STATE RADIATIONS, INC.		
Adv Pg 211	2351 S Crenshaw Ave, LA 64	Cal
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 113-C	260 W 17th St, New York 11	NY
TOKYO SHIBAURA ELECTRIC CO. LTD.	12 Yanagi-cho 1-Chome, Chiyoda-ku, Tokyo	Jap
20th Century Electronics Ltd.	King Henry's Dr, New Addington Croydon, Surrey	Eng
U. S. NUCLEAR CORP., Adv Pg 127	601 N Lake St, Box 2022, Burbank	Cal
VICTOREEN INSTRUMENT CO.,		
Adv. Pg. 4th Cover	2000-11 Hough Ave, Cleveland 3	Ohio
WESTINGHOUSE ELECTRIC CORP. ELECTRONIC TUBE DIV.		
Adv Pg 184	Box 284, Elmira	NY

CHARGERS--DOSIMETER
See DOSIMETER CHARGERS

CHELATING AGENTS
See DECONTAMINANTS

CHEMICALS
See Also ISOTOPE-LABELED COMPOUNDS
METALS, ALLOYS & COMPOUNDS

Acme Labs.	1160 Raymond Blvd, Newark 5	NJ
Allegro Unlimited, Inc.	22-01 43rd Ave, LIC 1	NY
Aluminum Co. of America	1501 Alcoa Bldg, Pittsburgh 19	Pa
AMERICAN POTASH & CHEM. CORP.,		
Adv Pg 184	3000 W 6th St, Los Angeles 54	Cal
Baker Chemical Co., J. T.	Phillipsburg	NJ
Barium & Chemicals, Inc.	4940 Erie St, Willoughby	Ohio
Bio-Rad Laboratories	2107 S 32nd St, Richmond	Cal
Bios Laboratories, Inc.	27 W 60th St, New York 23	NY
California Corp for Biochemical Research	3655 Medford St, Los Angeles 63	Cal
CARAD CORP. Adv Pg 224	3081 Jacksons Sawn Blvd, Palo Alto	Cal
CENTRAL SCIENTIFIC CO. Adv Pg 112	1900 Irving Park Rd, Chicago 13	Ill
Chemical Corporate	188 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Dow Chemical Co.	Midland	Mich
Dow Corning Corp.	Midland	Mich
Eagle-Picher Co.	American Bldg, Cincinnati 3	Ohio
Eastern Chemical Corp.	34 Spring St, Newark 4	NJ
FERRELL SYSTEM INC. Adv Pg 240	4000 East St, Elkhart	Ind
Grace & Co., W. R. Davison Chemical Div.	Erwin	Tenn
Hammel Co. O.	Box 475, Pittsburgh 30	Pa
Kessler Chemical Co. Inc.	State Rd. & Cottman Ave, Phila. 35	Pa
Kohlmann, Ets.	55 bd de l'Amiral-Bruix, Paris 16e	Fr
Morlaty, Inc., A. D.	150 Broadway, New York 38	NY
Mallinckrodt Chemical Works	Sud & Mallinckrodt Sts. St. Louis 7	Mo
Montrose Chemical & Repair Corp.	453 Hamilton Ave, Brooklyn 32	NY
Mathews Co.	502 Paterson Plank Rd, E Rutherford	NJ
IMPERIAL CONCENTRATES & CHEMICALS INC.		
Adv Pg 23	Box 185, Loveland	Colo
Monsanto Chemicals Ltd.	10/18 Victoria St, London SW1, Eng	
Nash & Thompson Ltd.	Hook Rise S, Tolworth, Surbiton, Surrey	Eng
Nuclear Enterprises (GB) Ltd.	Sighthill, Edinburgh 11	Scot
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),		
Adv. Pgs. 212, 219, 221	1000 Vanes St, Apollo	Pa
Oakite Products, Inc.	19 Rector St, New York 6	NY
PACKARD INSTRUMENT CO. INC.		
Adv. Pgs. 84, 85	Box 428, La Grange	Ill
PECHINEY, Adv Pg 109	23 Rue Balzac, Paris, 8ème	Fr
Pennsalt Chemicals Corp.	3 Penn Center, Philadelphia 3	Pa
PFIZER & CO. INC., CHARLES,		
Adv Pg 117	235 E 42nd St, New York 17	NY
Philadelphia Quartz Co.	1144EX Public Ledger Bldg, Phila. 6	Pa
PILOT CHEMICALS, INC. Adv Pg 237	Dept. N, 36 Pleasant St, Watertown 72	Mass
Reichhold Chemicals, Inc.	525 N Broadway, White Plains	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
TORCH PRODUCTS, INC. Adv Pg 129	Box 1008, Whittier	Cal
Union Carbide Chemicals Co. Div. UCC	270 Park Ave, New York 17	NY
U. S. Borax Research Corp.	412 Crescent Way, Anaheim	Cal
U. S. STEEL CORP., Adv. Pgs. 32, 37	525 Wm. Penn Pl, Pittsburgh 30	Pa
VAN-LAC-GID CHEMICAL CO.,		
Adv Pg 247	116 Grand St, New York 4	NY
Will Corp.	Box 1004, Rochester 3	NY

CHEMICALS--LABELED
See ISOTOPE-LABELED COMPOUNDS

CHOKES--FILTER
See INDUCTANCES

CHROMATOGRAPHIC APPARATUS

American Instrument Co. Inc.	8030 Georgia Ave, Silver Spring	Md
Aminotrex-Bentzine Corp	111 W Jewel Ave, St. Louis 22	Mo
ATOMIC ACCESSORIES, INC., Adv Pg 206	611 W Hewlett Rd, Valley Stream	NY
Atomic Devel. & Machine Corp.	15-04 120 St, College Point 56	NY
B & K Labs. Ltd.	4 Tilney St, Park Ln, London W1	Eng
Bio-Rad Laboratories	2107 S 32nd St, Richmond	Cal
Burrell Corp.	2000 5th Ave, Pittsburgh 19	Pa
California Corp for Biochemical Research	3655 Medford St, Los Angeles 63	Cal
CENTRAL SCIENTIFIC CO. Adv Pg 112	1900 Irving Park Rd, Chicago 13	Ill
Consolidated Electrodynamics Corp.	360 Sierra Madre Villa, Pasadena	Cal
D. I. S. I. Nuclear Corp.	Via A. Bordoni 30, Milan	Ital
Deposum Inc. Control Systems Div.	6466 Mirimar Rd, La Jolla	Cal
Dr. Virus KG	10 Rosenbergweg, Bonn	Ger
Engis Equipment Co	431 S Dearborn St, Chicago	Ill
Equipment Atomicos Brasileiro Ltda.	Box 2204, Rio de Janeiro	Braz
Fischer & Porter Co.	50 Warminster Rd, Warminster	Pa
FISH-SCHURMAN CORP. Adv Pg 234	70 Portman Rd, New Rochelle	NY
FORMO SCIENTIFIC CO. Adv Pg 234	633 Lincoln St, Evanston	Ill
FOXBORO CO. Adv Pg 108	38 Neponset Ave, Foxboro	Mass
FRESENIUS & HOEPFNER GMBH,		
Adv Pg 113-H	Bebenhausen-Bronn	Ger
Gallenkamp & Co. Ltd., A.	Sun St, London, E. C. 2, England	
GILLIAND Instrument Co. Inc.	Box 1068, Oakland 1	Cal
Isotope Accessories Co.	5222 Westminster Ave, Philadelphia 31	Pa
KOHNSTOM LABS. INC., WILLIAM K.		
Adv Pg 189	2617 Woodland Ave, Baltimore 15	Md
Leeds & Northrup Co.	4901 Stenton Ave, Phila 44	Pa
Leeds & Northrup Ltd.	Broad St, Birmingham 15	Eng
L'Electronique Appliquee	55 rue de Docteur Finlay, Paris 15	Fr
Mathews Co.	502 Paterson Plank Rd, E Rutherford	NJ
NUCLEAR-CHICAGO CORP.,		
Adv. Pgs. 54-57	365 E Howard Ave, Des Plaines	Ill
Nuclear Research Applications Ltd.	Bell St, Reigate (Surrey)	Eng
PACKARD INSTRUMENT CO. INC.		
Adv. Pgs. 84, 85	Box 428, La Grange	Ill
Perkin & Co. Ltd., Beam, Electronics Div.	2 Pilton, Edinburgh 5	Scot
Perkin-Elmer Corp.	Norwalk	Conn
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 107	Eindhoven	Neth
Picker X-Ray Corporation	1270 Mamaroneck Ave, White Plains	NY
Pye & Co. Ltd., W. G.	Tenth St, Cambridge, England	
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	665 Hewlett Rd, Lynbrook	NY
Research Specialties Co.	1090 S Garrard Blvd, Richmond	Cal
ROYAL RESEARCH CORP. Adv Pg 21	11024 Dublin Blvd, Hayward	Cal
S. A. I. P.	30 Rue Gabriel Crie, Malakoff, Seine	Fr
Schaco Scientific Div. Schenker & Co.	76 Cliff St, New York 38	NY
Scientific Glass Apparatus Co., Inc.	100 Lakewood Terr, Bloomfield	NJ
SEAD	Via Tordento 57, Milan	Ital
Servo Nuclear Corp.	29-21 Astoria Blvd, Long Island City	NY
Siemens & Halske AG	Hauptverwaltung, 80, Wittelsbacherstr, Munich	
Thomas Co., Arthur H.	Vine St at 3rd, Philadelphia 6	Pa
Upjohn Assoc	103 rue de Sèvre, Lyon 6e	Fr
Vanguard Instrument Co	Box 546, LaGrange	Ill
Will Corp.	Box 1008, Rochester 3	NY

CIRCULATORS--GAS
See COMPRESSORS--AIR & GAS
FANS & BLOWERS

CLEANERS--ULTRASONIC
See ULTRASONIC EQUIPMENT

CLOTHING MONITORS--RADIOACTIVITY
See Under MONITORS--RADIATION

CLOTHING--PROTECTIVE
See Also MASKS--PROTECTIVE
SERV. & CONS'LT: LAUNDRY

Air Industries Co. Inc.	150 E 42nd St, New York 17	NY
American Optical Co. Safety Prods. Div.	10 Mechanic St, Southbridge	Mass
Angelica Uniform Co.	1400 Olive St, St Louis 3	Mo
BAR-RAY PRODUCTS, INC. Adv Pg 19	209 10th St, Brooklyn 32	NY
Barnard Co.	Box 106, Two Rivers	Wis
Bestrick Associates, Inc	150 E 42nd St, New York 22	NY
CHARLESTON BRASSIE CO. Adv Pg 188	7 South Industrial Pk, Charleston	SC
D. I. S. I. Nuclear Corp.	Via A. Bordoni 30, Milan	Ital
DEFENSE APPAREL, Adv Pg 229	115 Alfon St, Hartford 3	Conn
Eastwood Plastics, Ltd, Primy Wks.	Arterial Rd, Leigh-on-Sea, Essex, Eng	
Federal-Mogul-Bower Bearings, Inc	11001 Shoemaker Ave, Detroit 13	Mich
General Scientific Equipment Co.	Lincoln & Williams, Philadelphia 41	Pa
Industrial Over-All Laundry	1054 Thomaston Ave, Waterbury 14	Conn
Insomnia Industrial Uniform Rental Service	206 Parker St, Indian Orchard	Mass
Julius Garrelle	32 E 40th St, New York 16	NY
Kimberly & Mathews Co.	Ambler	Pa
Nuclear Decontamination Corp.	130 Wilson St, Apollo	Pa
NUCLEAR ENGINEERING CO. INC.,		
Adv Pg 179	65 Bay St, Box 714, Pleasanton	Cal
Neisner Laundry Service Inc.	Box 4166, Waterbury 16	Conn
Plasco Co.	Box 307, Springfield	Ohio
Plastimayd Corp.	2204 SE 7th Ave, Portland 14	Ore
Pressbüro & Co. oHG	Box 2708, Frankfurt/Main 1, Germany	
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	665 Hewlett Rd, Lynbrook	NY
Radiation Hazard Control Co.	Fort Atkinson	Wis
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Spyder Mfg. Co. Inc.	Box 484, New Philadelphia	Ohio
Standard Safety Equipment Co.	433 N Quentin Rd, Palatine	Ill
Sunny Rubber Co.	N High St, Carrollton	Ohio
TRACERLAB, INC. Adv. Pgs. 134, 135-6	1601 Trapelo Rd, Waltham 54	Mass
Union Industrial Equipment Corp	Port Chester	NY
Wattlin, Inc.	353 W 20th St, New York 1	NY

CLUTCHES--MAGNETIC

Bowmar Instrument Corp.	8000 Hoffman Rd, Fort Wayne	Ind
Cutler-Hammer, Inc.	433 N 18th St, Milwaukee 1	Wis
General Electric Co. Ltd, of England	Kelvin, Kent, England	
Hodge Controls Div. Ortron Corp.	100 River Rd, Cos Cob	Conn
KEARFOTT DIV. GEN. PRECISION, INC.		
Adv Pg 229	1150 Bellvale Ave, Little Falls	NJ
L'Electronique Appliquee	55 rue de Docteur Finlay, Paris 15	Fr
Reeves Instrument Corp.	E Gate Blvd, Garden City	NY
Valcor Engineering Corp.	333 Carnegie Ave, Kenilworth	NJ

COATINGS--PROTECTIVE, PERMANENT
See Also PAINTS--PROTECTIVE

ALLIED ENGINEERING & PRODUCTION CORP.,		
Adv Pg 242	3421 Blending Ave, Alameda	Cal
Arco Co.	7301 Bessemer Ave, Cleveland 27	Ohio
Biggs Co., Carl H.	1847 14th St, Santa Monica	Cal
Bestrick Associates, Inc	150 E 42nd St, New York 22	NY
Carboline Co.	32 Healey Ind. Ct. St. Louis 17	Mo
Carborundum Co. R & D Div	New Prods. Dr. MRC, Niagara Falls	NY
CHARLESTON RUBBER CO. Adv Pg 188	7 South Industrial Pk, Charleston	SC
Chemtigon Corp. of America	Box 1229, Waterbury 20	Conn
Columbia Technical Corp.	56-56 Halpo-Oto Exp. W, Woodside 77	NY
Consolidated Electrodynamics Corp.	360 Sierra Madre Villa, Pasadena	Cal
Curtiss-Wright Corp. Research Div.	Quehanna	Pa
Dow Chemical Co.	Midland	Mich
DREWSEN PRODUCTS, INC. Adv Pg 208	Essex Barrington	Mass
du Pont de Nemours & Co. Inc., E. I.	Wilmington 98	Del
Eagle-Picher Co.	American Bldg, Cincinnati 1	Ohio
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 600, Groton	Conn
Engelhard Industries, Inc.	113 Astor St, Newark 2	NJ
Exceptional Products, Inc.	Joppa	Md
Foster Co., Benjamin	4535-37 W Girard Ave, Philadelphia 31	Pa
General American Transportation Corp.	135 S LaSalle St, Chicago 3	Ill
Hammel Co. O.	Box 475, Pittsburgh 30	Pa
Hysol Corp.	2850 Hampton Ave, Clifton	NY
Laboratory Equipment Corp.	St. Joseph	Mich
LINDE CO. DIV. OF UCC, Adv Pg 120	270 Park Ave, New York 17	NY
Montrose Chemical & Repair Corp.	453 Hamilton Ave, Brooklyn 32	NY
Metal Diffusion Ltd.	238 Merton Rd, Lakewood, Melb.	Eng
Minne Corrosion Co.	New Buffalo	Mich
Moore & Co., Samuel	Moore & Orchard Sts, Niantic	Ohio
Regional Research Corp	79 Memorial Dr, Cambridge 42	Mass
New York Air Brake Co.	230 Park Ave, New York 17	NY
Norton Co.	1 New Bond St, Worcester 6	Mass
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),		
Adv. Pgs. 217, 219, 221	7000 Vanes St, Apollo	Pa
Nuclear Metals, Inc.	Box 333 Concord	Mass
Oakite Products, Inc.	19 Rector St, New York 6	NY
Pennsalt Chemicals Corp.	3 Penn Center, Philadelphia 3	Pa
Permaglo Corp. of America	50-43 56th St, Woodside	NY
Pfaudler Co. Div. Pfaudler Permutit Inc.	1000 West Ave, Rochester 8	NY
Philadelphia Quartz Co.	1144EX Public Ledger Bldg, Phila. 6	Pa
Pittsburg Chemical Co. Protection Coatings Div.	Grant Bldg, Pittsburg 19	Pa
Plastodyne Corp.	3839 S Main St, Santa Ana	Cal
Polymer Corp.	2250 Fairmount, Reading	Pa
Prince Chemical Corp.	699 Main St, Woodbury	NY
Radiation Applications, Inc.	36-40 37th St, Long Island City 1	NY
Reynolds-Manhattan, Inc.	Arnold & Stingel Sts, Manheim	Pa
Reilly Tar & Chemical Corp.	1515 Merchants Bank Bldg, Indianapolis 4	Ind
ROYAL RESEARCH CORP. Adv Pg 21	11024 Dublin Blvd, Hayward	Cal
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Smith Corp., A. O., Atomic & Pumps Equip. Div.	5003 N 27 St, Milwaukee 1	Wis
Telecomputing Corp.	8126 Aero Dr, San Diego 23	Cal
TELEFLEX INC. Adv Pg 245	Church Rd, North Wales	Pa
Tennant Co., G. H.	701 N Lilac Dr, Minneapolis 22	Minn
Thermal-Dynamics Corp.	Lebanon	Ill
United Shoe Machinery Corp.	Atomic Power Dept.	Mass
Vickers Armstrong (S Marston) Ltd.	Swindon, Wiltshire	Eng
Venac Co.	147 Meadow Rd, Rutherford	NJ

COATINGS--PROTECTIVE, REMOVABLE

Acheson Colloids Co.	1600 Washington Ave, Port Huron	Mich
ALLIED ENGINEERING & PRODUCTION CORP.,		
Adv Pg 242	3421 Blending Ave, Alameda	Cal
Amercoat Corp.	5656 Firestone Blvd, South Gate	Cal
Biggs Co., Carl H.	1847 14th St, Santa Monica	Cal
Bestrick Associates, Inc	150 E 42nd St, New York 22	NY
Carboline Co.	32 Healey Ind. Ct. St. Louis 17	Mo

Columbia Technical Corp.	26-28 Bleyer-Qua Exp. W, Woodside 77	NY
du Pont de Nemours & Co. Inc., E. I.	Wilmington 98	Del
Eagle-Picher Co.	American Bldg, Cincinnati 1	Ohio
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
Foster Co., Benjamin	4035-37 W Girard Ave, Philadelphia 31	Pa
Glidden Co.	900 Union Commerce Bldg, Cleveland 16	Ohio
Knapp Construction Co., Andrew	25-15 Borden Ave, Long Island City 1	NY
Knapp Mills, Inc.	25-15 Borden Ave, LIC 1	NY
Morningstar Paisley, Inc.	820 W 41st St, New York 19	NY
National Research Corp.	70 Memorial Dr, Cambridge 42	Mass
Nuclear Metals, Inc.	Box 1232 Concord	Mass
Oakite Products, Inc.	19 Rector St, New York 6	NY
Pennsalt Chemicals Corp.	3 Penn Center, Philadelphia 2	Pa
Pecco Chemical Corp.	100 Main St, Westbury	NY
ROYAL RESEARCH CORP. Ad= Pg 21	11824 Dublin Blvd, Hayward	Cal
SAINT-GOBAIN NUCLEAIRE, Ad= Pg 229	22 Rd G. Clemenceau, Courbevoie, Seine	Fr
Tapco Div. Thompson Ramo Wooldridge Inc.	23665 Euclid Ave, Cleveland 17	Ohio
Telecomputing Corp.	8125 Aero Dr, San Diego 11	Cal
TELEFLEX INC. Ad= Pg 242	Church Rd, North Wales	Pa
TURCO PRODUCTS, INC. Ad= Pg 129	Box 1003, Wilmington	Cal

COINCIDENCE & ANTICOINCIDENCE ANALYZERS

See ANALYZERS—COINCIDENCE & ANTICOINCIDENCE

COLD TRAPS

See TRAPS

COLORIMETERS

Allied Research Associates, Inc.	83 Leon St, Boston 15	Mass
Bausch & Lomb, Inc.	46008 Bausch St, Rochester 2	NY
Eagle Equipment Co.	451 S Dearborn St, Chicago	Ill
Electro Corp. Scientific Instrument Div.	16 W 46th St, New York 36	NY
Gallenkamp & Co. Ltd., A.	Sun St, London, E. C. 2, England	
GELMAN INSTRUMENT CO. Ad= Pg 233	Box 1154-H, Chelsea	Mich
HAZAN CHEMICALS & CONTROLS, INC. Ad= Pg 28	Box 1345, Pittsburgh 30	Pa
Honeywell Controls, Ltd.	Vanderbilt Ave, Toronto, Ont Canada	
Instrument Development Labs, Inc.	67 Mechanic St, Attleboro	Mass
INSTRUMENTATION ASSOCIATES, INC. Ad= Pg 236	17 W 60th St, New York 23	NY
Lumo Industries	336 N Foothill Rd, Beverly Hills	Cal
MINE-ANDERSTELL RES CO. BOIL PROBE GROUP. Ad=. Pgs. 120, 240	Wayne & Walnut Aves, Phila 44	Pa
Photodyne Corp	3000 S Main St, Santa Ana	Cal
Roy Co., Milton	1300 E Mermaid Ln, Phila 18	Pa
Spectral Instruments Lab, Inc.	212 W Vine Ave, Knoxville 02	Tenn
TOKYO SHIBAURA ELECTRIC CO. LTD. Ad= Pg 235	12 Tsuda-cho 1-Chome, Chiyoda-ku, Tokyo	Jap

COLUMNS—ABSORPTION

Alco Products, Inc.	Box 1005, Schenectady 5	NY
ALLIS-CHALMERS MFG. CO., Ads. Pgs. 109-111	931 E 80th St, Milwaukee	Wis
AVERY & SAUL CO., Ads Pg 73	115 Rindge Ave, Cambridge	Mass
Babcock & Wilcox Ltd.	209 Euston Rd, London NW 1, England	
Bethlehem Steel Corp.	701 E 3rd St, Bethlehem	Pa
Chiyoda Chemical Eng. & Const. Co Ltd	1-30, Hibiya-Shinbashi, Minato-Ku, Tokyo, Japan	
Cochran & Co. Annan, Ltd.	34 Victoria St, London SW1, England	
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
Corning Glass Works, Shielding Radiation	Corning	NY
Fraser & Co. Ltd., W. J.	Harold Hill, Romford, Essex, England	
General American Transportation Corp.	135 S LaSalle St, Chicago 3	Ill
Graver Tank & Mfg. Co. Div. Union Tank Car Co.	35 E Wacker Dr, Chicago 1	Ill
Gesellschaftsgetriebe Siebtechnik AG	Lipperfeld 1, Oberhausen Rhld.	Ger
Harvey & Co. (London) Ltd., G. A.	Woolwich Rd, London, SE7	Eng
Horton Steel Works, Ltd.	55 Adelaide St, W, Toronto	Ont
Knapp Mills Inc.	25-15 Borden Ave, LIC	NY
Leader Iron Works, Inc.	2110 N Jasper St, Decatur	Ill
Motherwell Bridge & Engg. Co. Ltd.	Box 4, Motherwell, Scotland	
NATIONAL ANNEALING BOX CO. Ad= Pg 184	Box 520, Washington	Pa
NATIONAL CARBON CO. DIV. OF UCC, Ads. Pgs. 96, 97	270 Park Ave, New York 17	NY
NERATOMA, N. V., Ad= Pg 112-F	Hoofdstraat 30, The Hague	Neth
Nooter Corp.	1404 S 3rd St, St. Louis 66	Mo
PACIFIC COAST ENGINEERING CO. Ad= Pg 280	Denver E, Alameda	Cal
Patterson Foundry & Machine Co.	East Liverpool	Ohio
Pfaudler Co. Div. Pfaudler Permutit Inc.	1000 West Ave, Rochester 3	NY
Radiation Products, Inc.	Pl. 40 Rd, Flushing 52	NY
Reinforflex Corp.	Woodland Rd, Rowland	NJ
SAINT-GOBAIN NUCLEAIRE, Ad= Pg 229	23 Rd G. Clemenceau, Courbevoie, Seine	Fr
Scientific Glass Apparatus Co., Inc.	100 Lakewood Terr, Bloomfield	NJ
Southwestern Engineering Co.	4800 Santa Fe Ave, Los Angeles 58	Cal
Sulzer Bros. Ltd.	Winterthur	Switz
Superior Air Products Co.	120 Halsey St, Newark 2	NJ
Will Corp.	Box 1000, Rochester 3	NY

COLUMNS—ION-EXCHANGE

See ION-EXCHANGE EQUIPMENT
RESINS—ION-EXCHANGE

COLUMNS—SOLVENT-EXTRACTION

ALLIS-CHALMERS MFG. CO., Ads. Pgs. 109-111	931 E 80th St, Milwaukee	Wis
AVERY & SAUL CO., Ads Pg 73	115 Rindge Ave, Cambridge	Mass
Babcock & Wilcox Ltd.	209 Euston Rd, London NW 1, England	
Bethlehem Steel Corp.	701 E 3rd St, Bethlehem	Pa
Chemical Separations Corp.	Box 1081, Oak Ridge	Tenn
Chiyoda Chemical Eng. & Const. Co Ltd	1-30, Hibiya-Shinbashi, Minato-Ku, Tokyo, Japan	
Cochran & Co. Annan, Ltd.	34 Victoria St, London SW1, England	
Fraser & Co. Ltd., W. J.	Harold Hill, Romford, Essex, England	
General American Transportation Corp.	135 S LaSalle St, Chicago 3	Ill
Graver Tank & Mfg. Co. Div. Union Tank Car Co.	35 E Wacker Dr, Chicago 1	Ill
Gesellschaftsgetriebe Siebtechnik AG	Lipperfeld 1, Oberhausen Rhld.	Ger
Harvey & Co. (London) Ltd., G. A.	Woolwich Rd, London, SE7	Eng
Horton Steel Works, Ltd.	55 Adelaide St, W, Toronto	Ont
Leader Iron Works, Inc.	2110 N Jasper St, Decatur	Ill
NERATOMA, N. V., Ads Pg 112-F	Hoofdstraat 30, The Hague	Neth
Nooter Corp.	1404 S 3rd St, St. Louis 66	Mo
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Ads. Pgs. 217, 219, 221	1000 Warren St, Apollo	Pa
Patterson Foundry & Machine Co.	East Liverpool	Ohio
Reinforflex Corp.	Woodland Rd, Rowland	NJ
SAINT-GOBAIN NUCLEAIRE, Ads Pg 229	23 Rd G. Clemenceau, Courbevoie, Seine	Fr
Scientific Glass Apparatus Co., Inc.	100 Lakewood Terr, Bloomfield	NJ
Thompson, Ltd., John	Wolverhampton	Eng
Will Corp.	Box 1000, Rochester 3	NY

COMMUNICATION SYSTEMS

A.E.I. Ltd.	30 Grosvenor Pl, London SW1, Eng	
Aerona Div Aerojet-General Corp	418 N Citrus Ave, Covina	Cal
Automatic Electric Sales Corp.	Northlake	Ill
Beckman Corp Beckman Pacific Div.	11800 Sherman Way, N Hollywood	Cal
Designers for Industry, Inc.	4041 Fulton Pkwy, Cleveland 9	Ohio
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
Fairchild Camera & Instr. Corp. Defense Prods. Div.	300 Robbins Ln, Syosset	NY
Feller Engineering & Mfg. Co.	6656 N Monticello Ave, Skokie	Ill
Fernseh Electric, Inc.	Industrial Pk, 01, Plainview	NY
Ferranti-Packard Electric Ltd.	Industry St, Toronto 15, Ontario, Canada	
GPL DIV. GENERAL PRECISION INC. Ad= Pg 139	63 Bedford Rd, Pleasantville	NY
General Electric Co. Communn. Prods. Dept.	Lynchburg	Va
Heath Co.	Benton Harbor	Mich
Hogan Faximile Corp. Sub. Telautograph Corp.	635 Greenwich St, New York 14	NY
Hyson Mfg. Co.	700 Royal Oaks Dr, Monrovia	Cal
KAMAN NUCLEAR, Ads. Pgs. 180, 181	Garden of the Gods Rd, Colo Springs	Colo
LAND-AIR INC. SUB. DYNALECTRON INC. Ad= Pg 204	7444 W Wilson Ave, Chicago 31	Ill
Leach Corp.	10650 Tamara Rd, Compton	Cal
Litton Industries	336 N Foothill Rd, Beverly Hills	Cal
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
Magnavox Laboratories, Inc.	975 Fairfield Ave, Stamford	Conn
Marconi's Wireless Telegraph Co. Ltd.	Chelmsford, Essex	Eng
Philco Corp. Govt. & Ind. Gr.	4700 Wissahickon Ave, Phila 44	Pa
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Ad= Pg 180	Eindhoven	Neth
Radio Corp. of America Industrial Electronic Prods.	Front & Cooper Sts, Camden 2	NJ
Raytheon Co. Communications & Data Processing Operation	3435 Benner-Providence Tnpk, Norwood	Mass
Standard Tel. & Cables Ltd.	20 Glasshouse Yd, London EC 1	Eng
Sylvania Electronic Systems	40 Sylvan Rd, Waltham 54	Mass
TRG, Inc	5 Aerial Way, Syosset	NY
Telecomputing Corp.	8125 Aero Dr, San Diego 11	Cal
TERMINAL RADIO INTERNATIONAL LTD. Ad= Pg 112-C	240 W 17th St, New York 11	NY
Tesla Electronics Co. Inc.	Wilton	Conn
Union Industrial Equipment Corp	Fort Chester	NY
Victor Adding Machine Co.	3900 N Rockwell St, Chicago 18	Ill
Wheeler Electronic Corp.	100 E Aurora St, Waterbury 20	Conn

COMPOUNDS—LABELED

See ISOTOPE-LABELED COMPOUNDS

COMPRESSORS—AIR & GAS

A.E.I. Ltd.	30 Grosvenor Pl, London SW1, Eng	
Atlas Engineering Co.	420 Lexington Ave, New York 17	NY
Air Control, Inc.	420 Kedzie Ave, Hadsville	Pa
ALLIS-CHALMERS MFG. CO., Ads. Pgs. 109-111	931 E 80th St, Milwaukee 1	Wis
American Instrument Co. Inc.	8030 Georgia Ave, Silver Spring	Md
American-Standard Industrial Div.	Detroit 32	Mich
American-Standard Prod. (Can) Ltd.	1001 Dupont St, Toronto 6, Ont	Can
Beach-Russ Co.	420 Lexington Ave, New York 17	NY
Bryan Donkin's Engines, Ltd.	Knightsbridge, London S. W. 7	Eng
Compressors a Membrane Cathin	60 bd, Saint Marcel, Paris 6	Fr
Consolidated Pneumatic Tool Co.	22E Dover Rd, London EW6	Eng
Cooper-Bessemer Corp	Mount Vernon	Ohio
De Havilland Engine Co. Ltd.	Stag Ln, Edgware, Middlesex	Eng
De Vilbiss Co.	300 Phillips Ave, Toledo 1	Ohio
Dunham-Bush, Inc.	179 South St, West Hartford 10	Conn
Garrett Corp.	9851 Sepulveda Blvd, Los Angeles 45	Cal
Gast Mfg. Corp.	Box 117-M, Benton Harbor	Mich
General Electric Co. Ltd. of England	Brick, Kent, England	
Gesellschaftsgetriebe Siebtechnik AG	Lipperfeld 1, Oberhausen Rhld.	Ger
Holzer Maschinenbau & Giesserei	Ludwigshafen, Rhein	Ger
Hunworthy Engineering Ltd.	Poole, Dorset, England	
Ingersoll-Rand Co.	11 Broadway, New York 4	NY
Johnson Service Co.	Milwaukee 1	Wis
Joy Mfg. Co. Industrial Div.	R. W. Oliver Bldg, Pittsburgh 22	Pa
Kahlenberg Bros. Co.	12th & Mission Sts, Two Rivers	Wis
Kiddie & Co. Inc., Walter	377 Main St, Belleville 9	NJ
Nash Engineering Co.	450 Wilson Rd, S Norwalk	Conn
Ocenda Engines Ltd.	Box 4015 Town A, Toronto	Can
Sales Corp. of America	Decatur	Pa
Simmering-Graz-Pauker AG	Simmeringer Haupstr. 95, Vienna 7	Aus
SOCIETE RATEAU, Ad= Pg 112-T	Rue Rateau La Courneuve, Seine	Fr
Sulzer Bros. Ltd.	Winterthur	Switz
Telecomputing Corp.	8125 Aero Dr, San Diego 11	Cal
Tuthecraft Inc.	1940 S Myrtle Ave, Monrovia	Cal
Vilter Mfg. Co.	2217 S First St, Milwaukee 7	Wis
Worthington Ltd & Co. (1958) Ltd.	Redditch, Manchester, England	
WORTHINGTON CORP. Ad= Pg. 2nd Cover	401 Harrington Ave, Harrison	NJ
York Corp.	Guardley Rd, York	Pa

COMPUTER ACCESSORIES

A.E.I. Ltd.	30 Grosvenor Pl, London SW1, Eng	
Bryan Accoplement Ltd.	Willow Ln, Mitcham, Surrey, England	
California Tech. Ind. Div. Tusco Inc.	1401 Old County Rd, Belmont	Cal
Cambridge Thermionic Corp.	445 Concord Ave, Cambridge 38	Mass
Computer Control Co. Inc.	983 Concord St, Framingham	Mass
Control Data Corp.	501 Park Ave, Minneapolis 15	Minn
D.I.S.T. Nuclear Corp.	Via A. Bredesi 20, Milan	Ital
Digital Equipment Corp.	Maynard	Mass
Dynac, Div. Hewlett-Packard Co.	395 Page Mill Rd, Palo Alto	Cal
Dell Electronics Ltd.	Hayes, Middlesex	Eng
Electronic Associates, Inc.	Long Branch	NJ
EX-CELLO CORP. ATOMICS DIV. Ads. Pgs. 8, 9	1200 Dolman Blvd, Detroit 32	Mich
Feist-Tek Inc.	Box 945, Amery	Wis
Feedback, Ltd.	1 The Broadway, Crowborough, Sussex	Eng
Fernseh-Packard Electric Ltd.	Industry St, Toronto 15	Ont
General Applied Science Labs. Inc.	Merrick & Stewart Ave, Westbury	NY
Honeywell Controls, Ltd.	Vanderbilt Ave, Toronto, Ont Canada	
Johnstaxin Systems, Inc.	17111 National Blvd, LA 24	Cal
LAND-AIR INC. SUB. DYNALECTRON INC. Ad= Pg 204	7444 W Wilson Ave, Chicago 31	Ill
Litton Industries	336 N Foothill Rd, Beverly Hills	Cal
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
Perkin & Co. Ltd., Bean, Electronics Div.	2 Pilton, Edinburgh 9	Scot
Philbrick Researches Inc., George A.	127 Clarendon St, Boston 16	Mass
Philco Corp. Govt. & Ind. Gr.	4700 Wissahickon Ave, Phila 44	Pa
Radio Corp. of America Industrial Electronic Prods.	Front & Cooper Sts, Camden 2	NJ
Raytheon Co. Communications & Data Processing Operation	3435 Benner-Providence Tnpk, Norwood	Mass
Rose Engineering, Inc.	A & Courtland, Philadelphia 20	Pa
Short Bros & Harland Ltd.	Queens Island, Belfast	N Ire
Solartron Electronic Group Ltd.	Victoria Rd, Farnborough, Hants	Eng
Sperry Gyroscope Co. Div. Sperry Rand Corp.	Great Neck	NY
Sylvania Electronic Systems	40 Sylvan Rd, Waltham 54	Mass
Taylor Instrument Co.	80 Arnot St, Rochester 1	NY
Telecomputing Corp.	8125 Aero Dr, San Diego 11	Cal
Telemarker Magnetics Inc.	Box 1010, Culver City	Cal

TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 113-C	249 W 17th St. New York 11	NY
Victor Adding Machine Co.	3900 N Rockwell St, Chicago 18	Ill
Wang Laboratories	12 Huron Dr. Natick	Mass

COMPUTER SERVICES

See SERV. & CONS'LT: COMPUTER

COMPUTERS—ANALOG

A.E.I. Ltd.	33 Grosvenor Pl. London SW1, Eng	
American Bosch Arma Corp.	320 Fulton Ave. Hempstead	NY
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,		
Adv Pg 113-D	Charleroi	Belg
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
BAILEY METER CO. Adv Pg 69	29801 Euclid Ave. Wickliffe	Ohio
Beirsch Instrument Corp.	118-02 14th Ave. College Point 56	NY
Bendix Corp. Eclipse Pioneer Div.	Teterboro	NJ
Bristol Co.	Box 1790 BBG, Waterbury 95	Conn
Canadian Westinghouse Co. Ltd.	Box 510, Hamilton, Ontario, Canada	
Curtiss-Wright Corp. Princeton Div.	Box 110, Princeton	NJ
D.E.I.S. Nuclear Corp.	Via A. Bembo 20, Milan	Ital
Designers for Industry, Inc.	4041 Fulton Pkwy, Cleveland 9	Ohio
Ehrl Electronics Ltd.	Hayes, Middlesex	Eng
Electronic Associates, Inc.	Long Branch	NJ
Electronique & Automatisme, ste d'	Courbevoie Seine	Fr
Equipment Associates Brazilian Ltda.	Box 5884, Rio de Janeiro	Braz
Evershed & Vignoles, Ltd. Acton Lane Wks.	Chiswick, London W4	Eng
Fabri-Tek Inc.	Box 645, Amery	Wis
Feedback, Ltd.	1 The Broadway, Crowborough, Sussex	Eng
FOXBORO CO. Adv Pg 189	38 Neponset Ave. Foxboro	Mass
Garrett Corp.	9851 Sepulveda Blvd, Los Angeles 45	Cal
General Applied Science Labs. Inc.	Merrick & Stewart Ave. Westbury	NY
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 12	1 River Rd. Schenectady 5	NY
GENERAL MILLS INC. ELECTRONIC OR. AUTOMATIC HANDLING EQUIP. DEPT. Adv Pg 17	409 N 5th St. Minneapolis 1	Minn
Heath Co.	Benton Harbor	Mich
Hitachi, Ltd	1-4-chome Marunouchi, Chiyoda-ku, Tokyo	Jap
Honeywell Controls, Ltd.	Vanderhoof Ave. Toronto, Ont Canada	
Information Systems, Inc.	10131 National Blvd. LA 34	Cal
KRAMPOTT DIV. GEN. PRECISION, INC.		
Adv Pg 223	1150 McBride Ave. Little Falls	NJ
Lands & Northrop Co.	4306 Stenton Ave, Phila 44	Pa
Librascope Div. Gen Precision, Inc.	Glendale 1	Cal
Link Div. - Gen. Precision, Inc.	Binghamton	NY
Litton Industries	336 N Foothill Rd, Beverly Hills	Cal
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
MINN.-HONEYWELL REG CO. HOL PRODS GROUP,		
Adv. Pgs. 126, 240	Wayne & Windrim Aves. Phila. 44	Pa
Nash & Harrison Ltd.	1855 Wellington St, Ottawa, Canada	
Navigation Computer Corp.	Valley Forge Ind Pk, Norristown	Pa
Panellit Div. ISI Inc.	7401 N Hamlin Ave. Skokie	Ill
Philco Corp. Govt. & Ind. Gr.	4700 Wissahickon Ave. Phila 44	Pa
Radio Corp. of America Industrial Electronic Prods.	Front & Cooper Sts. Camden 2	NJ
Ramsen Research	Box 188, San Pedro	Cal
Reliance Electric & Engineering Co.	24701 Euclid Ave. Cleveland 17	Ohio
Ross Engineering, Inc.	A & Courtland, Philadelphia 20	Pa
Royal-McBee Corp.	850 3rd Ave. New York 22	NY
Servomechanisms Inc.	250 Aviation Blvd, El Segundo	Cal
Special Instruments Laboratory, Inc	315 W Vine Ave, Knoxville 16	Tenn
Sperry Gyroscope Co. Div. Sperry Rand Corp.	Great Neck	NY
Sylvania Electronic Systems	40 Sylvan Rd. Waltham 54	Mass
Tapco Div. Thompson Ramo Wooldridge Inc.	23555 Euclid Ave. Cleveland 17	Ohio
Telecomputing Corp.	8125 Aero Dr. San Diego 11	Cal
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 113-C	249 W 17th St. New York 11	NY
THOMSON-HOUSTON (CIE. FRANCAISE)		
Adv Pg 113-D	173 Blvd. Haussmann, Paris 8	Fr
TOKYO SHIBAURA ELECTRIC CO. LTD.	12 Yurika-cho 1-Chome, Chiyoda-ku,	
Adv Pg 225	Tokyo	Jap
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. DEPT.		
Adv. Pgs. 70, 71	Pittsburgh	Pa

COMPUTERS—DIGITAL

A.E.I. Ltd.	33 Grosvenor Pl, London SW1, Eng	
American Bosch Arma Corp.	320 Fulton Ave. Hempstead	NY
Automatrix, Inc. Div. C. V. Reed Co Inc.	5900 S Hoover, Los Angeles 44	Cal
Automatrix Div. North Amer. Aviation	9150 E Imperial, Downey	Cal
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Bailey Meter Co. Ltd.	1010 St. Catherine St. W, Montreal, Que	Can
Bendix Computer Div. Bendix Corp.	5630 Arbor Vitae St. Los Angeles 45	Cal
Bendix Corp. Eclipse Pioneer Div.	Teterboro	NJ
Canadian Westinghouse Co. Ltd.	Box 510, Hamilton, Ontario, Canada	
Computer Control Co. Inc.	983 Concord St. Framingham	Mass
Control Data Corp.	501 Park Ave. Minneapolis 15	Minn
Daystrom Inc. Control Systems Div.	4669 Mission St. La Jolla	Cal
Designers for Industry, Inc.	4041 Fulton Pkwy, Cleveland 9	Ohio
Digital Equipment Corp.	Maynard	Mass
Ehrl Electronics Ltd.	Hayes, Middlesex	Eng
Electronique & Automatisme, ste d'	Courbevoie Seine	Fr
Fabri-Tek Inc.	Box 645, Amery	Wis
Forrest Electric, Inc	Industrial Pk. 81, Flemington	NJ
Forrest-Packard Electric Ltd.	Bellamy St, Toronto 18, Ontario, Canada	
FOXBORO CO. Adv Pg 189	38 Neponset Ave. Foxboro	Mass
General Applied Science Labs. Inc.	Merrick & Stewart Ave. Westbury	NY
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 12	1 River Rd. Schenectady 5	NY
IBM-Singer, Inc.	Science Pk. Box 60, State College	Pa
Hamilton Standard Div. United Aircraft Corp.	Sect. A, Bond Beach	Conn
Hitachi, Ltd	1-4-chome Marunouchi, Chiyoda-ku, Tokyo	Jap
Honeywell Controls, Ltd.	Vanderhoof Ave. Toronto, Ont Canada	
Honeywell Electronic Data Processing Div	60 Walnut St, Wellesley Hills 81	Mass
Information Systems, Inc.	10131 National Blvd. LA 34	Cal
LAND-AIR INC. SUB. DYNALECTRON INC. Adv Pg 204	7444 W Wilson Ave. Chicago 31	Ill
Lands & Northrop Co.	4306 Stenton Ave, Phila 44	Pa
Librascope Div. Gen Precision, Inc.	Glendale 1	Cal
Link Div. - Gen. Precision, Inc.	Binghamton	NY
Litton Industries	336 N Foothill Rd, Beverly Hills	Cal
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
MINN.-HONEYWELL REG CO. HOL PRODS GROUP,		
Adv. Pgs. 126, 240	Wayne & Windrim Aves. Phila. 44	Pa
Nash & Harrison Ltd.	1855 Wellington St, Ottawa, Canada	
Navigation Computer Corp.	Valley Forge Ind Pk, Norristown	Pa
Panellit Div. ISI Inc.	7401 N Hamlin Ave. Skokie	Ill
Philco Corp. Govt. & Ind. Gr.	4700 Wissahickon Ave. Phila 44	Pa
Radio Corp. of America Industrial Electronic Prods.	Front & Cooper Sts. Camden 2	NJ
Ramsen Research	Box 188, San Pedro	Cal
Reliance Electric & Engineering Co.	24701 Euclid Ave. Cleveland 17	Ohio
Ross Engineering, Inc.	A & Courtland, Philadelphia 20	Pa
Royal-McBee Corp.	850 3rd Ave. New York 22	NY
Servomechanisms Inc.	250 Aviation Blvd, El Segundo	Cal
Special Instruments Laboratory, Inc	315 W Vine Ave, Knoxville 16	Tenn
Sperry Gyroscope Co. Div. Sperry Rand Corp.	Great Neck	NY
Standard Tel. & Cables Ltd.	29 Glasshouse Yd. London EC 1	Eng
Sylvania Electronic Systems	40 Sylvan Rd. Waltham 54	Mass
TRW Computers Co.	8433 Fallbrook Ave. Canoga Park	Cal
Tapco Div. Thompson Ramo Wooldridge Inc.	23555 Euclid Ave. Cleveland 17	Ohio
TECHNICAL MEASUREMENT CORP.		
Adv Pg 63	461 Washington Ave. North Haven	Conn
Telecomputing Corp.	8125 Aero Dr. San Diego 11	Cal
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 113-C	249 W 17th St. New York 11	NY
TOKYO SHIBAURA ELECTRIC CO. LTD.	12 Yurika-cho 1-Chome, Chiyoda-ku,	
Adv Pg 225	Tokyo	Jap
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. DEPT.		
Adv. Pgs. 70, 71	Pittsburgh	Pa

CONCRETE—SHIELDING

See SHIELDING—RADIATION

CONDENSERS—ELECTRICAL

See CAPACITORS

CONDENSERS—POWER PLANT

AEG, Adv Pg 113-A	Hauptstrasse, Frankfurt/Main, Germany	
A.E.I. Ltd.	33 Grosvenor Pl, London SW1, Eng	
Advanced Technology Labs.	397 Whisman St. Mountain View	Cal
ALLIS-CHALMERS MFG. CO.,		
Adv. Pgs. 109-111	931 S 70th St. Milwaukee 1	Wis
Alsthom, Nuclear Div.	38, Ave. Kleber, Paris 16, France	
Aqua-Chem, Inc.	225 N Grand Ave. Waukesha	Wis
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Barbier, Benard & Turenne, Anc. Ets.	62 rue Caviel, Paris 15e	Fr
Bethlehem Steel Corp.	701 E 3rd St, Bethlehem	Pa
Condenser Service & Engrg. Co, Inc.	150 Observer Hwy, Hoboken	NJ
Croll-Reynolds Engineering Co.	1123 Main St. Stamford	Conn
FOSTER WHEELER CORP. Adv Pg 139	666 5th Ave. New York 19	NY
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 12	1 River Rd. Schenectady 5	NY
Graham Mfg. Co., Inc.	170 Great Neck Rd, Great Neck	NY
Gutehoffnungshuette Sterkrade AG	Lippefeld 1, Oberhausen Rhld.	Ger
Hamon N.V. Airdrie, S	Monceau-sur-Sambre	Belg
Hitachi, Ltd	1-4-chome Marunouchi, Chiyoda-ku, Tokyo	Jap
Ingersoll-Rand Co.	11 Broadway, New York 4	NY
Lester Beller & Engineering Corp.	2001 S Wolcott Ave, Chicago 6	Ill
Leader Iron Works, Inc.	1110 N Jasper St. Decatur	Ill
Maryland Shipbuilding & Drydock Co.	Box 5017, Baltimore 3	Md
MERATOIRE, H. V., Adv Pg 113-F	Hazebrouck 38, The Hague	Neth
Northern Research & Eng. Corp.	230 Main St, Cambridge	Mass
Simmering-Graz-Pauker AG	Simmeringer Hauptst. 95, Vienna 7	Aus
Societe Fives-Penhoet	300 rue Saint-Honore, Paris 1, France	
Southwestern Engineering Co.	4900 Santa Fe Ave. Los Angeles 58	Cal
Tosi, S.p.A., Franco	Legnano, Milan	Ital
Tolin Bedoring Corp.	550 Main Ave. Wallington	NJ
Vennes pour le Traitement des Eaux, S.A	1 Quai des Vennes, Liege	Belg
WESTINGHOUSE ELEC CORP. STEAM DIV.		
Adv. Pg. 72, 73	Lester	Pa
Wheeler Mfg. Co. C. H.	1850 Sedgley Ave. Philadelphia 32	Pa
WORTHINGTON CORP.		
Adv. Pg. 2nd Cover	401 Worthington Ave. Harrison	NJ

CONDENSERS—PROCESS

Advanced Technology Labs.	397 Whisman Rd. Mountain View	Cal
American-Standard Prod. (Can) Ltd.	1301 Dupont St. Toronto 4, Ont.	Can
Aqua-Chem, Inc.	225 N Grand Ave. Waukesha	Wis
Chiyoda Chemical Eng. & Const. Co Ltd	2-50, Nishi-Hachiobori, Minato-Ku, Tokyo, Japan	
Condenser Service & Engrg. Co, Inc.	150 Observer Hwy, Hoboken	NJ
Croll-Reynolds Engineering Co.	1123 Main St. Stamford	Conn
Feasteel Metallurgical Corp.	North Chicago	Ill
FOSTER WHEELER CORP. Adv Pg 139	666 5th Ave. New York 19	NY
Fraser & Co. Ltd., W. J.	Harold Hill, Romford, Essex, England	
Graham Mfg. Co., Inc.	170 Great Neck Rd, Great Neck	NY
Hamilton Russell Co.	Massillon	Ohio
Heat-X, Inc.	Brewster	NY
Horton Steel Works, Ltd.	55 Adelaide St. W, Toronto	Ont
Ingersoll-Rand Co.	11 Broadway, New York 4	NY
Leader Iron Works, Inc.	1110 N Jasper St. Decatur	Ill
Maryland Shipbuilding & Drydock Co	Box 5017, Baltimore 3	Md
NATIONAL CARBON CO. DIV. OF UCC,		
Adv. Pgs. 96, 97	270 Park Ave. New York 17	NY
MERATOIRE, H. V., Adv Pg 113-F	Hazebrouck 38, The Hague	Neth
Paterson Foundry & Machine Co.	East Liverpool	Ohio
Smith Corp., A. O., Atomic & Process Equip. Div.	3533 N 27 St. Milwaukee 1	Wis
Societe Fives-Penhoet	300 rue Saint-Honore, Paris 1, France	
Southwestern Engineering Co.	4900 Santa Fe Ave. Los Angeles 58	Cal
STOKES CORP., F. J. Adv Pg 241	5500 Tabor Rd. Philadelphia 20	Pa
Tolin Bedoring Corp.	550 Main Ave. Wallington	NJ
Vennes pour le Traitement des Eaux, S A	1 Quai des Vennes, Liege	Belg
Vilter Mfg. Co.	2217 S First St, Milwaukee 7	Wis
WESTINGHOUSE ELEC CORP. STEAM DIV.		
Adv. Pgs. 72, 73	Lester	Pa
Yuba Corp.	Grandview Rd. York	Pa

CONNECTORS—ELECTRICAL

AEG, Adv Pg 113-A	Hauptstrasse, Frankfurt/Main, Germany	
A.E.I. Ltd.	33 Grosvenor Pl. London SW1, Eng	
APM Corp.	41 Hoover St. Englewood	NJ
Alsthom, Nuclear Div.	38, Ave. Kleber, Paris 16, France	
AMP Inc.	Eisenhower Blvd, Harrisburg	Pa
Bunce Development Co.	213 W Baltimore Pike, Lansdowne	Pa
Bendix Corp. Scintilla Div.	Sidney	NY
Burndept Ltd.	West St. Erith, Kent, Eng	
Canoga Electric Canada Ltd.	160 Bartley Dr. Toronto 16, Ontario	
Canoga Electric Co.	2008 Humboldt St. Los Angeles 31	Cal
Cannamasi, Inc.	Box 55, Dept. HSG, New Lebanon Center	NY
Cole Electric Co.	9439 Stellar Dr. Culver City	Cal
COMPONENTS CORP. NUCLEAR INSTRUMENT DIV		
Adv Pg 198	306 Main St. Denville	NJ
Consolidated Electrodynamics Corp.	360 Sierra Madre Villa, Pasadena	Cal
Continental Connector Corp.	34-53 58th St, Woodside 77	NY
Bruno Corp. Scientific Instrument Div.	157 W 48th St, New York 36	NY
Evershed & Vignoles, Ltd. Acton Lane Wks.	Chiswick, London W4	Eng
Gavin Mfg. Co.	52 Hay St, Hartford	Ill
Gannett Corp.	9851 Sepulveda Blvd, Los Angeles 45	Cal
General Electric Co. Ltd. of England	Erith, Kent, England	
General Radio Co.	West Concord	Mass
Hew Material Industries, Melrose Edison Co.	Milwaukee 1	Wis
Omnium Div. Bundy Corp.	Norwalk	Conn
PHYSICAL SCIENCES CORP. Adv Pg 26	209 N Fair Oaks, Pasadena	Cal
Sealtron Corp.	Reading Rd. At Amity, Cincinnati 15	Ohio
Spinner Division Engineering Corp.	Engineering, 35, Munich 8, W Ger	
Superior Electric Co., The	383 Middle St, Bristol	Conn
Thermocouple Products Inc.	701 N Iowa St, Villa Park	Ill
WIGGINS OIL TOOL CO. INC., E. B.		
Adv Pg 207	3436 E Olympic Blvd. Los Angeles 23	Cal
Winchester Electronics Inc.	10 Willard Rd, Norwalk	Conn

CONSOLES, CABINETS & PANELS

AEG, Adv Pg 113-A	Hauptstrasse, Frankfurt/Main, Germany	
Ad-Tu Electronics Lab. Inc.	340 Tuthum Ave, Passaic	NJ
Acton Div Aerojet-General Corp	410 N Citrus Ave, Covina	Cal
ALLIED ENGINEERING & PRODUCTION CORP.,		
Adv Pg 242	1421 Bleading Ave. Alameda	Cal
Alsthom, Nuclear Div.	38, Ave. Kleber, Paris 16, France	
Amco Engineering Co.	7332 Atlantic St. Chicago 31	Ill
American Sterilizer Co.	Box 6290, Erie	Pa
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,		
Adv Pg 113-D	Charleroi	Belg
Atkins & Merrill, Inc.	Post Rd. South Sudbury	Mass
Automatic Control Engrg. Ltd.	Rooby Pl. Seagrave Rd, London SW6	Eng
BAILEY METER CO. Adv Pg 69	29801 Euclid Ave, Wickliffe	Ohio
Bailey Meter Co. Ltd.	1010 St. Catherine St. W, Montreal, Que	Can
Barnes Co., W. F. & John	201 S Water St. Rockford	Ill
Bendix Corp. Cincinnati Div.	3130 Wasson Rd. Cincinnati 8	Ohio
Canadian Westinghouse Co. Ltd.	Box 510, Hamilton, Ontario, Canada	
CHANDLER EVANS CORP. Adv Pg 120	Charter Oak Blvd. West Hartford	Conn
Cole Electric Co.	9439 Stellar Dr. Culver City	Cal

Dresco Engineering Inc. Control Systems Div.	Pier Lane W, Caldwell	NJ
Dynatron Radio Ltd.	St. Peter's Rd. Parne Plain, Maidenhead, Berks, Eng	
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
Electricite Mess Ste d'	11 rue Petit, Clichy Seine	Fr
Electronic Mesurs Co, Ltd.	Abbey Rd, Park Royal, NW 10, London	Eng
Evershed & Vignoles, Ltd. Acton Lane Wks.	Chiswick, London W4	Eng
Fairtron Co.	7 Fairtron Ct. Passaic	NJ
Flexibosch & Monn	Box 7722, Dallas 39	Tex
FOXBORO CO. Adv Pg 180	38 Neponset Ave. Foxboro	Mass
Gulpel Ltd., William, Vulcan Wks.	156/170 Bermondsey St. London, SE1, Eng	
General Dynamics /Pomona	Box 1011, Pomona	Cal
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Nuclear Corp	2903 S Cypress Ave, Fullerton	Cal
Hacker & Co. Inc., William J.	Box 646, West Caldwell	NJ
HARAN CHEMICALS & CONTROLS, INC.		
Adv Pg 38	Box 1346, Pittsburgh 30	Pa
Hitachi, Ltd	1-4-chome Marunouchi, Chiyoda-ku, Tokyo	Jap
Imhof Ltd. Alfred, Ashley Wks.	Cowley Mill Rd. Uxbridge, Middx.	Eng
Infilco Inc.	Box 8028, Tucson	Ariz
Information Systems, Inc.	10131 National Blvd, LA 34	Cal
Inst Electronica S.p.A.	Via Ignazio Pettinengo 75, Roma	Ital
Johnson Service Co.	Milwaukee 1	Wis
Kearney-Wagner Electric Co.	N Michigan & Mentor, South Bend	Ind
Leeds & Northrup Ltd.	Broad St, Birmingham 19	Eng 1000
L'Electronique Appliquee	31 rue de Docteur Finlay, Paris 15	Fr
MINN-HONEYWELL REG CO. INS. PRODS GROUP,		
Adv. Pgs. 126, 240	Wayne & Windsle Aves. Phila. 44	Pa
Mosaic Inc. Eds. Model Eng. & Mfg. Co.	4676 S State St, Salt Lake City	Utah
Nugent & Zemlica (Canada) Ltd	4 Brentcliff Rd. Toronto 14	Ont
NERATOMA, N. V., Adv Pg 112-F	Hoofdstraat 30, The Hague	Neth
Oerlikon Engineering Co.	Box 4015 Tram A, Toronto	Can
Pamelin Div. ISI Inc.	7401 N Hamlin Ave, Skokie	Ill
Par-Metal Products Corp.	32-02 48th St. LIC 3	NY
Philips Electronic Instruments	750 S Fulton Ave. Mt. Vernon	NY
Plaschem	Box 386 Chelsea	Mich
Plasticrafts Inc	Conroy & Glendale Sts, Exeter	Pa
Premier Metal Products Co.	237 Wanda St. Bronx 59	NY
RADIATION MEASUREMENT DEVELOPMENT LAB.		
Adv. Pgs. 216, 2204-0	41 E North Ave. Northlake	Ill
RADIATION TECHNOLOGY, INC.		
Adv. Pg. 3rd Cover	437 Amsco St. NW, Atlanta 18	Ga
Republic Flow Meter Co.	2200 Diversey Pkwy. Chicago 47	Ill
Research Inc.	Box 6184, Edina Sta. Minpls 24	Minn
Robinson & Co. Ltd., D.	5 & 7 Church Rd. Richmond, Surrey	Eng
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Rd 6. Chemesnay, Courbevoie, Seine	Fr
Taylor Instrument Co.	38 Ames St. Rochester 1	NY
Transcomposing Corp.	5155 Aero Dr. San Diego 11	Cal
THOMSON-HOUSTON (CIE. FRANCAISE)		
Adv Pg 112-D	173 Blvd. Haussmann, Paris 8	Fr
ULTRASONIC INDUSTRIES, INC.		
Adv Pg 66	Assoc Ct. Engrs. 000, Plainview	NY
United Mfg. Div. W. L. Maxson Corp.	41 Haig St. Hamden 14	Conn
U. S. Controls, Inc.	410 4th Ave. Brooklyn 15	NY
Universal Match Corp. Armament Div.	475 Paul Ave. St. Louis 26	Mo
Vickers-Armstrongs (S. Marston) Ltd.	Swindon, Wiltshire, England	
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. SECT.		
Adv. Pgs. 70, 71	Pittsburgh	Pa

CONSULTING
See SERVICES AND CONSULTANTS

CONTAINERS—FUEL-ELEMENT ("COLD")
See Also SHIELDING—RADIATION

ALLIS-CHALMERS MFG. CO.,		
Adv. Pgs. 109-111	935 S 70th St. Milwaukee	Wis
AMERICAN SMELTING & REFINING CO.,		
Adv Pg 67	120 Broadway, New York 5	NY
AVERY & SAUL CO., Adv Pg 73	113 Hedge Ave. Cambridge	Mass
CPC ENGINEERING CORP. Adv Pg 236	Box 36, Stoughton	Mass
Combustion Engineering, Inc.	900 Madison Ave. New York 18	NY
Curtiss-Wright Corp. Research Div.	Quehanna	Pa
DRESSER PRODUCTS, INC. Adv Pg 200	Great Barrington	Mass
EX-CELLO CORP. ATOMICS DIV.		
Adv. Pgs. 8, 9	1200 Oakman Blvd. Detroit 32	Mich
FRITZ WHEELER CORP. Adv Pg 128	656 5th Ave. New York 19	NY
NATIONAL ANNEALING BOX CO.		
Adv Pg 184	Box 338, Washington	Pa
Nuclear Metals, Inc.	Box 333 Concord	Mass
Pittsburgh-Des Moines Steel Co.	Neville Island, Pittsburgh 25	Pa
Radiation Products, Inc.	Ft. 49 Rd, Flushing 65	NY
Republic Steel Corp.	1441 Republic Bldg, Cleveland 1	Ohio
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Rd 6. Chemesnay, Courbevoie, Seine	Fr
STEARNS-ROGER MFG. CO. Adv Pg 32	Box 5888, Denver 17	Colo
SUPERIOR TUBE CO. Adv Pg 184	Box 191, Norristown	Pa
UNITED NUCLEAR CORP., Adv Pg 36	563 Westchester Ave. New Haven 4	Conn

CONTAINERS—PLASTIC

Air Control, Inc.	460 Hudson Ave, Hudson	Pa
ALLIED ENGINEERING & PRODUCTION CORP.,		
Adv Pg 242	3421 Blending Ave. Alameda	Cal
Allied Business Products, Inc.	Whitney Rd, & Clark St. Conneaut	Ohio
Atkins & Merrill, Inc.	Post Rd. South Sudbury	Mass
Berkier & Co	Pumlicher Str. 294, Braunschweig	Ger
Chicago Transparent Bag Co.	1727 W Grand Ave, Chicago	Ill
CONTROLLED ATMOSPHERE ENCLOSURES MFG CO		
Adv Pg 39	Leonard Air Base, Sarasota	Fla
Eastwood Plastics, Ltd. Priory Wks.	Amental Rd. Leigh-on-Sea, Essex	Eng
Haveg Industries Inc.	900 Greenbank Rd. Wilmington 8	Del
Kahle & Co. Inc., Walter,	577 Main St. Belleville 9	NJ
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
Pamelpac Div. St. Regis Paper Co.	Hamilton Ave. Trenton	NJ
PHOENIX-RHEINROHR AG, Adv Pg 27	August-Thyssen-Str 1, Duesseldorf	Ger
Plastimayd Corp.	2204 SE 7th Ave, Portland 14	Ore
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Rd 6. Chemesnay, Courbevoie, Seine	Fr
Snyder Mfg. Co. Inc.	Box 464, New Philadelphia	Ohio
WESTLAKE PLASTICS CO. Adv Pg 229	Box 34, Lenni Mills	Pa

CONTAINERS—RADIOISOTOPE
See Under SHIELDING—RADIATION

CONTAINMENT STRUCTURES—REACTOR
See Also CALANDRIAS—REACTOR VESSELS—PRESSURE, REACTOR

BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Babcock & Wilcox Ltd.	209 Euston Rd, London NW 1, England	
Baldwin-Lima-Hamilton Corp.	Dept 103, Philadelphia 42	Pa
BELGONUCLEAIRE, Adv Pg 112-L	35 rue des Colonies, Brussels 1	Belg
Bethlehem Steel Corp.	701 E 3rd St, Bethlehem	Pa
CPC ENGINEERING CORP. Adv Pg 236	Box 36, Stoughton	Mass
Chicago Bridge & Iron Co.	332 S Michigan Ave, Chicago 4	Ill
DRESSER PRODUCTS, INC. Adv Pg 200	Great Barrington	Mass
Dynatech Corp.	639 Massachusetts Ave, Cambridge 39	Mass
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
Elsner Tank & Mfg. Co. Div. Thiele Tank Car Co.	35 E Wacker Dr. Chicago 1	Ill
Hitachi, Ltd.	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
Hunter Steel Works, Ltd.	25 Adelaide St. W, Toronto	Ont
Mason Construction Co, Inc	1500 Far Hills Ave, Dayton 29	Ohio
McDermott Bridge & Engrg. Co. Ltd.	Box 4, Motherwell, Scotland	
NATIONAL ANNEALING BOX CO.		
Adv Pg 184	Box 338, Washington	Pa
NERATOM, N. V., Adv Pg 112-F	Hoofdstraat 30, The Hague	Neth
Pfaudler Co. Div. Pfaudler Permutit Inc.	1000 West Ave, Rochester 3	NY
PHOENIX-RHEINROHR AG, Adv Pg 27	August-Thyssen-Str 1, Duesseldorf	Ger
Pittsburgh-Des Moines Steel Co.	Neville Island, Pittsburgh 25	Pa
STEARNS-ROGER MFG. CO. Adv Pg 32	Box 5888, Denver 17	Colo
Salmet Bros. Ltd.	Wintonthur	Switz
Vickers Armstrong (S Marston) Ltd.	Swindon, Wiltshire	Eng

CONTROL EQUIPMENT—POWER PLANT
See Also CONTROL SYSTEMS—REACTOR

ABB, Adv Pg 112-A	Hausteam, Frankfurt/Main, Germany	
A.E.I. Ltd.	33 Grosvenor Pl. London SW1, Eng	
Advanced Technology Labs.	369 Whisman Rd. Mountain View	Cal
Aero-Flow Dynamics, Inc.	Carry	Pa
ALLIS-CHALMERS MFG. CO.,		
Adv. Pgs. 109-111	935 S 70th St. Milwaukee	Wis
Alsthom, Nuclear Div.	38, Ave. Kleber, Paris 16, France	
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,		
Adv Pg 112-G	Charleroi	Belg
Automatic Switch Co.	50d Hanover Rd. Florham Park	NJ
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
BAILEY METER CO. Adv Pg 69	29801 Euclid Ave. Wickliffe	Ohio
Bailey Meter Co, Ltd.	5910 St. Catherine St. W, Montreal, Que	Can
Black, Sivalls & Bryan, Inc.	7800 E 13 St. Kansas City 26	Mo
Canadian Westinghouse Co. Ltd.	Box 510, Hamilton, Ontario, Canada	
CHANDLER EVANS CORP. Adv Pg 139	Charter Oak Blvd. West Hartford	Conn
Clark Controller Co.	1146 E 152 St. Cleveland 10	Ohio
Computyne Corp.	400 S Warminster Rd. Hatboro	Pa
Control Data Corp.	501 Park Ave. Minneapolis 15	Minn
Cooper-Bessemer Corp.	Mount Vernon	Ohio
Curtiss-Wright Corp. Princeton Div.	Box 130, Princeton	NJ
Cutler-Hammer, Inc.	433 N 12th St. Milwaukee 1	Wis
Daystrom Inc. Control Systems Div.	4466 Mission Rd, La Jolla	Cal
Dr. Vieo KG	30 Bremsbergweg, Mainz	Ger
Electricite Mess Ste d'	11 rue Petit, Clichy Seine	Fr
Electronic Mesurs Co, Ltd.	Abbey Rd, Park Royal, NW 10, London	Eng
Flexibosch & Monn	Box 7722, Dallas 26	Tex
Fischer & Porter Co.	10 Warminster Rd. Warminster	Pa
FOXBORO CO. Adv Pg 180	38 Neponset Ave. Foxboro	Mass
Garrett Corp.	9851 Sepulveda Blvd, Los Angeles 45	Cal
Gulpel Ltd., William, Vulcan Wks.	156/170 Bermondsey St. London, SE1, Eng	
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Electric Co. Ltd. of England	Erith, Kent, England	
Hitachi, Ltd.	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
Information Systems, Inc.	10131 National Blvd, LA 34	Cal
Leach Corp.	18435 Sonata Rd. Compton	Cal
Leeds & Northrup Co.	4936 Stenton Ave, Phila 44	Pa
Leeds & Northrup Ltd.	Broad St, Birmingham 15	Eng
Litton Industries	336 N Foothill Rd, Beverly Hills	Cal
Minneapolis-Honeywell Div. of Washington Corp.	Hopewell	Mass
Mosaic Systems Inc.	Dept. T, Ft. Wash. Ind, Ft. Ft. Wash.	Pa
Nugent & Zemlica (Canada) Ltd	4 Brentcliff Rd, Toronto 14	Ont
NERATOM, N. V., Adv Pg 112-F	Hoofdstraat 30, The Hague	Neth
Oerlikon Engineering Co.	Zurich 50	Switz
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 147	Eindhoven	Neth
Republic Flow Meter Co.	2200 Diversey Pkwy. Chicago 47	Ill
Research Inc.	Box 6184, Edina Sta. Minpls 24	Minn
Robinson & Co. Ltd., D.	5 & 7 Church Rd. Richmond, Surrey	Eng
Rochester Instrument Systems Inc.	275 N Union St, Rochester 5	NY
Siemens & Halske AG	Hofmannstrasse, 50, Karlsruhe, Germany	
Standard Tel. & Cables Ltd.	10 Glasshouse Yd. London EC 1	Eng
STEWART CORP., F.N. Adv Pg 237	4911 Beaconsfield Ave. Chicago 13	Ill
Superior Electric Co., The	428 Middle St, Bristol	Conn
TEM Components Co.	6633 Fallbrook Ave. Canoga Park	Cal
Thompson, Ltd., John	Wolverhampton, England	
THOMSON-HOUSTON (CIE. FRANCAISE),		
Adv Pg 112-D	173 Blvd. Haussmann, Paris 8	Fr
TOKYO SHIBAURA ELECTRIC CO. LTD.	12 Tsunko-cho 1-Chome, Chiyoda-ku, Tokyo	Jap
Tosi, S.p.A., Franco	Legnano, Milan	Ital
U. S. Controls, Inc.	410 4th Ave, Brooklyn 15	NY
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. SECT.		
Adv. Pgs. 70, 71	Pittsburgh	Pa

CONTROL MATERIALS—REACTOR
See Specific Element Or Alloy Under METALS, ALLOYS & COMPOUNDS

CONTROL PANELS
See CONSOLES, CABINETS & PANELS

CONTROL-ROD DRIVE SYSTEMS
See Also CONTROL SYSTEMS—REACTOR
INDICATORS—CONTROL-ROD POSITION

ABB, Adv Pg 112-A	Hausteam, Frankfurt/Main, Germany	
A.E.I. Ltd.	33 Grosvenor Pl. London SW1, Eng	
AMF ATOMICS, Adv. Pgs. 76, 77, 79	140 Greenwich Ave. Greenwich	Conn
Aerojet Div Aerojet-General Corp	6352 N Citrus Ave, Covina	Cal
Alco Products Inc.	Box 1085, Schenectady 6	NY
ALLIED ENGINEERING & PRODUCTION CORP.,		
Adv Pg 242	3421 Blending Ave. Alameda	Cal
American Beach Arms Corp.	900 Fulton Ave. Hempstead	NY
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,		
Adv Pg 112-G	Charleroi	Belg
Atomics International Div. NAA	Box 309, Canoga Park	Cal
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
BELGONUCLEAIRE, Adv Pg 112-L	35 rue des Colonies, Brussels 1	Belg
Beckin Corp. Beckin Products Div.	401 Beckin Dr. South Bend	Ind
Combustion Engineering, Inc.	900 Madison Ave. New York 18	NY
Curtiss-Wright Corp. Princeton Div.	Box 130, Princeton	NJ
DIAMOND POWER SPECIALTY CORP.		
Adv Pg 1	Box 415, Lancaster	Ohio
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
Electricite Mess Ste d'	11 rue Petit, Clichy Seine	Fr
EX-CELLO CORP. ATOMICS DIV.		
Adv. Pgs. 8, 9	1200 Oakman Blvd. Detroit 32	Mich
Flight Refueling Inc.	Box 1791, Baltimore 3	Md
Garrett Corp.	9851 Sepulveda Blvd, Los Angeles 45	Cal
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.		
Adv Pg 180	Box 608, San Diego 12	Cal
General Dynamics /Fort Worth	Box 748 Fort Worth 1	Tex
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Electric Co. Ltd. of England	Erith, Kent, England	
Hitachi, Ltd.	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
Hydro Aire Co. Div. Crane Co.	3000 Winona Ave. Burbank	Cal
JERGRAM-BAYLESS CO., Adv Pg 188	34750 Sales Rd. Eden	Minn
Killer Tool & Die Inc.	3801 Tillman Ave. Cleveland 5	Ohio
Marquardt Corp.	16555 Saticoy St. Van Nuys	Cal
Marvel-Schebler Products Div. Borg-Warner Corp.	5326 S Elvin Rd. Decatur	Ill
NEWBURGH MACHINE CORP., Adv Pg 93	Silver Creek	NY
Peebles & Co. Ltd., Burn, Electronics Div.	2 Pilrig, Edinburgh 5	Scot
Rochester Instrument Systems Inc.	275 N Union St, Rochester 5	NY
RUCKER CO., THE, Adv Pg 187	4700 San Pablo Ave. Oakland 8	Cal
Siemens & Halske AG	Hofmannstrasse, 50, Karlsruhe	Ger
Siemens Schuckertwerke AG	Wesser-von-Siemens Str. 50, Erlangen	Ger
SOCIETE RATEAU, Adv Pg 112-T	Rue Rateau La Courneuve, Seine	Fr
Tapco Div. Thompson Ramo Wooldridge Inc.	23555 Euclid Ave. Cleveland 17	Ohio
TELEPLEX INC. Adv Pg 141	Church Rd. North Wales	Pa
THOMSON-HOUSTON (CIE. FRANCAISE),		
Adv Pg 112-D	173 Blvd. Haussmann, Paris 8	Fr
United Nuc Industries Corp. Atomic Power Dept.	Robb St, Beverly	Mass
U. S. Controls, Inc	410 Fourth Ave, Brooklyn 15	NY
VARD, Adv Pg 125	3901 E Colorado, Pasadena	Cal
Vickers Armstrong (S Marston) Ltd.	Swindon, Wiltshire	Eng
WESTINGHOUSE ELEC. CORP. ATOMIC EQUIPMENT DEPT.		
Adv. Pgs. 68, 69 & 70, 71	Cheswick	Pa

CONTROL ROD DRIVES
1. *ELECTROMECHANICAL*
2. *HYDRAULIC, PNEUMATIC*
3. *MAGNETIC*

ABB, 1, Adv Pg 112-A	Hausteam, Frankfurt/Main, Germany	
A.E.I. Ltd, 1	33 Grosvenor Pl. London SW1, Eng	
AMF ATOMICS, 1-2, Adv. Pgs. 76, 77, 79	140 Greenwich Ave. Greenwich	Conn

Alco Products, Inc. 1 ..... Box 1885, Schenectady 5 ..... NY
ALLIED ENGINEERING & PRODUCTION CORP. 2,
Adv Pg 242 ..... 2437 Blending Ave. Alameda ..... Cal
ALLIS-CHALMERS MFG. CO. 1-2,
Adv. Pgs. 109-111 ..... 900 S 70th St. Milwaukee ..... Wis
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, 1-2-3,
Adv Pg 112-0 ..... Charleroi ..... Belg
Atomics International Div. NAA Inc. ..... Box 309, Canoga Park ..... Cal
Auxi-Atomes, 1 ..... 11 rue de la Pepiniere, Paris 8e ..... Fr
BABCOCK & WILCOX CO. 1-2-3,
Adv. Pgs. 34, 35 ..... 161 E 42 St. New York 17 ..... NY
Bendix Corp. Bendix Products Div. 1-3 ..... 401 Bendix Dr. South Bend ..... Ind
Combustion Engineering, Inc. 1-2-3 ..... 200 Madison Ave, New York 16 ..... NY
Cordier-Wright Corp. Princeton Div. 1 ..... Box 116, Princeton ..... NJ
DIAMOND POWER SPECIALTY CORP. 1-2
Adv Pg 1 ..... Box 415, Lancaster ..... Ohio
Electricite Mon Sur d', 1-2 ..... 11 rue Petit, Clichy Seine ..... Fr
EX-CELLO CORP. ATOMICS DIV. 1-2-3,
Adv. Pgs. 8, 9 ..... 1200 Oakman Blvd. Detroit 32 ..... Mich
Flight Refueling Inc. 1-2 ..... Box 1701, Baltimore 3 ..... Md
Garrett Corp. 1 ..... 9851 Sepulveda Blvd. Los Angeles 45 ..... Cal
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. 1-2-3,
Adv Pg 202 ..... Box 608, San Diego 12 ..... Cal
General Controls Co. 1 ..... 801 Allen Ave, Glendale 1 ..... Cal
General Dynamics/Fort Worth, 1 ..... Box 748 Fort Worth 1 ..... Tex
GENERAL ELECTRIC CO. APPARATUS SALES, 1-2,
Adv. Pgs. 11, 12 ..... 1 River Rd. Schenectady 5 ..... NY
General Electric Co. Ltd. of England, 1 ..... Erith, Kent, England
GENERAL MILLS INC. ELECTRONIC GR. AUTOMATIC
HANDLING GROUP. DEPT. 1, Adv Pg 17 ..... 479 N 5th St. Minneapolis 1 ..... Minn
General Regulator Corp. 1 ..... 800 5th Ave, New York 19 ..... NY
Hanna Engineering Works, 2 ..... 1707 Elston Ave. Chicago 22 Ill
Hitachi, Ltd. 1-2 ..... 1-4 Marunouchi, Chiyoda-ku, Tokyo ..... Jap
Hoover Electric Co. 1 ..... Port Columbus Airpt, Columbus 19 ..... Ohio
Hydro Aire Co. Div. Cross Co. 2 ..... 3000 Winona Ave, Burbank ..... Cal
JERGRAM-BAYLESS CO. 1-2, Adv Pg 108 ..... 24700 Lakes Rd. Salem ..... Ohio
Jordan Controls Inc. 1 ..... 2916 W Hampton Ave, Milwaukee 9 ..... Wis
KEARFOTT DIV. GEN. PRECISION, INC. 2,
Adv Pg 227 ..... 1150 Suffolk Ave. Little Falls ..... NJ
Kearny-Wagner Electric Co. 2 ..... N Michigan & Mentor, South Bend ..... Ind
Metcalfe Lein Inc, 1-2-3 ..... 101 Mill Lane, Mountainside ..... NJ
Marquardt Corp. 2 ..... 16555 Saticoy St. Van Nuys ..... Cal
Marvel-Schebler Products Div.
Borg-Warner Corp. 1-2-3 ..... 2186 S Elvin Rd. Decatur Ill
NEVERSLIP MACHINE CORP., 1,
Adv Pg 93 ..... Silver Creek ..... NY
Partlow Corp., 1 ..... Dept. NUC-68, New Hartford ..... NY
Rosemount Controls Ltd. 2 ..... 660 Decarie Blvd. Montreal, Que. Can.
RUCKER CO., THE, 2, Adv Pg 107 ..... 4700 San Pablo Ave. Oakland 8 ..... Cal
Siemens & Halske AG, 1 ..... Hofmannstrasse, 50, Karlsruhe ..... Ger
SOCIETE RATEAU, 1-2-3, Adv Pg 113-T ..... Rue Ernest Le Cannuyer, Saint ..... Fr
Spectrol Electronics Corp., 1 ..... 1704 S Del Mar Ave, San Gabriel ..... Cal
Tapco Div. Thompson Ramo Wooldridge Inc., 1-2 ..... 23555 Euclid Ave. Cleveland 17 ..... Ohio
TELEFLEX INC. 1-2-3, Adv Pg 240 ..... Church Rd. North Wales ..... Pa
UNITED NUCLEAR CORP. 1-2-3,
Adv Pg 26 ..... 362 Winchester Ave. New Haven 4 ..... Conn
United Shoe Machinery Corp. Atomic Power Dept. 1-2 ..... Beach St. Beverly ..... Mass
YARD, 1-2-3, Adv Pg 125 ..... 2901 E Colorado, Pasadena ..... Cal
Vickers Armstrong (S Marston) Ltd, 1 ..... Swindon, Wiltshire ..... Eng
Wann Regulator Co. 2 ..... 10 Embankment St. Lawrence ..... Mass
WESTINGHOUSE ELEC. CORP. ATOMIC EQUIPMENT DEPT. 1-2,
Adv. Pgs. 18, 19 & 70, 71 ..... Cheswick ..... Pa

CONTROL RODS—REACTOR

AMF ATOMICS, Adv. Pgs. 76, 77, 79 ..... 140 Greenwich Ave. Greenwich ..... Conn
ALLIS-CHALMERS MFG. CO.,
Adv. Pgs. 109-111 ..... 900 S 70th St. Milwaukee 1 ..... Wis
AMERICAN SMELTING & REFINING CO.,
Adv Pg 67 ..... 120 Broadway, New York 5 ..... NY
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,
Adv Pg 112-0 ..... Charleroi ..... Belg
Atomics International Div. NAA ..... Box 309, Canoga Park ..... Cal
BABCOCK & WILCOX CO.
Adv. Pgs. 34, 35 ..... 161 E 42 St. New York 17 ..... NY
Carborundum Co. R & D Div ..... New Prod. Dr. NUC, Niagara Falls ..... NY
Combustion Engineering, Inc. ..... 200 Madison Ave, New York 16 ..... NY
DIAMOND POWER SPECIALTY CORP.
Adv Pg 1 ..... Box 415, Lancaster ..... Ohio
DRESSER PRODUCTS, INC. Adv Pg 208 ..... Great Barrington ..... Mass
EX-CELLO CORP. ATOMICS DIV.
Adv. Pgs. 8, 9 ..... 1200 Oakman Blvd. Detroit 32 ..... Mich
General Aniline & Film Corp. ..... 140 Toledano Ave, Yonkers 3 ..... NY
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.
Adv Pg 202 ..... Box 608, San Diego 12 ..... Cal
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 12 ..... 1 River Rd. Schenectady 5 ..... NY
Sheffield Ltd. ..... Vulcan Rd. Sheffield 9 ..... Eng
Hitachi, Ltd. ..... 1-4 Marunouchi, Chiyoda-ku, Tokyo ..... Jap
Kiffer Tool & Die Inc. ..... 6001 Tilman Ave. Cleveland 2 ..... Ohio
L & S Machine Co. Inc. ..... Box 317, R. D. 3, Latrobe ..... Pa
L'Electronique Appliquee ..... 25 rue de Docteur Finlay, Paris 15 ..... Fr
MARTIN CO. NUCLEAR DIV. Adv Pg 5 ..... Baltimore 3 ..... Md
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),
Adv. Pgs. 217, 219, 221 ..... 1080 Waters St. Apollo ..... Pa
Nuclear Metals, Inc. ..... Box 335 Concord ..... Mass
Research Development Manufacture, Inc. ..... 429 E Cotton St. Philadelphia 44 ..... Pa
Siemens Schuckertwerke AG ..... Wernier-von-Siemens Str. 50, Erlangen ..... Ger
SUPERIOR TUBE CO. Adv Pg 198 ..... Box 198, Germantown ..... Pa
SYLVAN DIV. TYLYNN ELECTRONS, INC.
Adv Pg 36 ..... Castleton Rock Rd. Hicksville ..... NY
Talbot Steel Tube Co. Ltd. ..... Green Ln. Walsall, Staffs, England
Tube Investments Ltd. ..... Astor Manor, Birmingham 6 ..... Eng
UNITED NUCLEAR CORP., Adv Pg 26 ..... 362 Winchester Ave. New Haven 4 ..... Conn
YARD, Adv Pg 125 ..... 2901 E Colorado, Pasadena ..... Cal
WESTINGHOUSE ELEC. CORP. ATOMIC FUEL DEPT.
Adv. Pgs. 121 & 70, 71 ..... Cheswick ..... Pa

CONTROL SYSTEMS—REACTOR

See Also CONTROL-ROD DRIVES
CONTROL RODS
INDICATORS—CONTROL-ROD POSITION
REACTOR INSTRUMENT SYSTEMS

AEG, Adv Pg 113-A ..... Hanauer, Frankfurt/Main, Germany
AMF ATOMICS, Adv. Pgs. 76, 77, 79 ..... 140 Greenwich Ave. Greenwich ..... Conn
Aerco Div Aerojet-General Corp ..... 410 N Citrus Ave, Covina ..... Cal
ALLIS-CHALMERS MFG. CO.,
Adv. Pgs. 109-111 ..... 900 S 70th St. Milwaukee 1 ..... Wis
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,
Adv Pg 112-0 ..... Charleroi ..... Belg
Atomics International Div. NAA ..... Box 309, Canoga Park ..... Cal
Automatic Control Engng. Ltd. ..... Bexby Pl. Seagrave Rd. London SW6 ..... Eng
BABCOCK & WILCOX CO.
Adv. Pgs. 34, 35 ..... 161 E 42 St. New York 17 ..... NY
Barnes Co., W. F. & John ..... 301 S Water St. Rockford Ill
Bell Telephone Mfg. Co. ..... 33 Berkenrode, Hoboken/Antwerp ..... Belg
Bendix Corp. Cincinnati Div. ..... 3130 Wasson Rd. Cincinnati 6 ..... Ohio
Canadian General Electric Co Ltd. ..... 107 Park St. Peterborough, Ont. ..... Can
Canadian Westinghouse Co. Ltd. ..... Box 510, Hamilton, Ontario, Canada
Cordier-Wright Corp. Princeton Div. ..... Box 116, Princeton ..... NJ
Deprotron Inc. Control Systems Div. ..... 4656 Mirimar Rd. La Jolla ..... Cal
Designers for Industry, Inc. ..... 6941 Fulton Pkwy. Cleveland 9 ..... Ohio
DRESSER PRODUCTS, INC. Adv Pg 208 ..... Great Barrington ..... Mass
EX-CELLO CORP. ATOMICS DIV.
Adv. Pgs. 8, 9 ..... 1200 Oakman Blvd. Detroit 32 ..... Mich
Fleischhack & Moore ..... Box 7788, Dallas 26 ..... Tex
FOXBORO CO. Adv Pg 189 ..... 38 Neponset Ave. Foxboro ..... Mass
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.
Adv Pg 202 ..... Box 608, San Diego 12 ..... Cal
General Dynamics/Electronics ..... 100 Carlton Rd. Rochester 3 ..... NY
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 12 ..... 1 River Rd. Schenectady 5 ..... NY
General Electric Co. Ltd. of England ..... Erith, Kent, England
Hitachi, Ltd. ..... 1-4 Marunouchi, Chiyoda-ku, Tokyo ..... Jap
Honeywell Controls, Ltd. ..... Vandenhof Ave, Toronto, Ont Canada
Hoover Electric Co ..... Port Columbus Airpt, Columbus 19 ..... Ohio
Leeds & Northrup Ltd. ..... Broad St, Birmingham 19 ..... Eng
Lockheed Aircraft Corp. Georgia Div. ..... 1500 Hockside Dr. NW, Atlanta 18 ..... Ga
Marquardt Corp. ..... 16555 Saticoy St. Van Nuys ..... Cal
Marvel-Schebler Products Div.
Borg-Warner Corp. ..... 2186 S Elvin Rd. Decatur Ill
MINN-HONEYWELL REG CO. NUCL PRODS GROUP.
Adv. Pgs. 128, 240 ..... Wayne & Wesbite Avenues. Phila. 44 ..... Pa
Plessey Nucleonics Ltd. ..... Wendon St. Northampton ..... Eng
REACTOR EXPERIMENTS, INC.
Adv Pg 28 ..... 140 Harlow Blvd. Belmont ..... Cal
Rochester Instrument Systems Inc. ..... 278 N Union St. Rochester 5 ..... NY
Siemens & Halske AG ..... Hofmannstrasse, 50, Karlsruhe, Germany
Standard Tel. & Cables Ltd. ..... 29 Glasshouse Yd. London EC 1 ..... Eng
STEARNS-ROGER MFG. CO. Adv Pg 52 ..... Box 5888, Denver 17 ..... Colo
Tapco Div. Thompson Ramo Wooldridge Inc. ..... 23555 Euclid Ave., Cleveland 17 ..... Ohio
UNITED NUCLEAR CORP., Adv Pg 26 ..... 362 Winchester Ave. New Haven 4 ..... Conn
U. S. Controls, Inc. ..... 419 4th Ave. Brooklyn 15 ..... NY
Vickers Armstrongs (S. Marston) Ltd. ..... Swindon, Wiltshire, England
Vickers, Inc. Electric Products Div. ..... 1815 Locust St. St. Louis 3 ..... Mo
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. DEPT.
Adv. Pgs. 70, 71 ..... Pittsburgh ..... Pa

CONTROLLERS—PROPORTIONING

A.E.I. Ltd. ..... 33 Grosvenor Pl. London SW1, Eng
Assembly Products, Inc. ..... 34 Wilson Mills Rd. Cleveland ..... Ohio
Automatic Control Engng. Ltd. ..... Bexby Pl. Seagrave Rd. London SW6 ..... Eng
BAILEY METER CO. Adv Pg 69 ..... 29801 Euclid Ave. Wickliffe ..... Ohio
Bailey Meter Co. Ltd. ..... 8010 St. Catherine St. W. Montreal, Que Can
Brisol Co. ..... Box 1790 NHG, Waterbury 90 ..... Conn
Cambridge Instrument Co. Ltd. ..... 13 Grosvenor Pl. London SW1 ..... Eng
Eckardt AG, J. C. ..... Pragstr. 72/82, Stuttgart-bad Cannstatt ..... Ger
Electronic Meters Co. Ltd. ..... Abbey Rd. Park Royal, NW 10, London ..... Eng
Electronic Processes Corp. ..... 435 Bryant St. San Francisco ..... Cal
Fischer & Porter Co. ..... 30 Warminster Rd. Warminster ..... Pa
Fisher Governor Co. ..... Box 207, Marshalltown ..... Iowa
FOXBORO CO. Adv Pg 189 ..... 38 Neponset Ave. Foxboro ..... Mass
Garrett Corp. ..... 9851 Sepulveda Blvd. Los Angeles 45 ..... Cal
General Controls Co. ..... 801 Allen Ave. Glendale 1 ..... Cal
HAGAN CHEMICALS & CONTROLS, INC.
Adv Pg 28 ..... Box 1348, Pittsburgh 30 ..... Pa
Herring-Hall-Marvin Inc. ..... Newcomb Ave. Hampton ..... Va
Honeywell Controls, Ltd. ..... Vandenhof Ave. Toronto, Ont Canada
Hoover Electric Co ..... Port Columbus Airpt, Columbus 19 ..... Ohio
Johnson Service Co. ..... Milwaukee 1 ..... Wis
Jordan Controls Inc. ..... 2916 W Hampton Ave, Milwaukee 9 ..... Wis
Kates Co., W. A. ..... 430 Washington Rd. Deerfield Ill
Leeds & Northrup Co. ..... 4936 Stenton Ave, Phila 44 ..... Pa
Leeds & Northrup Ltd. ..... Broad St. Birmingham 19 ..... Eng
Marsh-Nuclear Div. of Worthington Corp. ..... Harwood ..... Mass
MINN-HONEYWELL REG CO. NUCL PRODS GROUP.
Adv. Pgs. 128, 240 ..... Wayne & Wesbite Avenues. Phila. 44 ..... Pa
NERATOOM, N. V., Adv Pg 113-F ..... Noordeinde 30, The Hague ..... Neth
New York Air Brake Co ..... 230 Park Ave. New York 17 ..... NY
Partlow Corp. ..... Dept. NUC-58 New Hartford ..... NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 187 ..... Eindhoven ..... Neth
Republic Flow Meter Co. ..... 2260 Diversey Pkwy. Chicago 47 Ill
Research Inc. ..... Box 6106, Edina Sta. Minph 56 ..... Minn
Siemens & Halske AG ..... Hofmannstrasse, 50, Karlsruhe, Germany
Squires Co., C. E. ..... 18502 Syracuse Ave. Cleveland 10 ..... Ohio
Taylor Instrument Cos. ..... 38 Acme St. Rochester 7 ..... NY

CONTROLS—FILM-THICKNESS

See GAGES—THICKNESS, NONRADIOACTIVITY
GAGES—THICKNESS OR DENSITY, RADIOACTIVITY

CONTROLS—FLUID-FLOW

See Also METERS—FLOW

AEG, Adv Pg 113-A ..... Hanauer, Frankfurt/Main, Germany
Aero-Flow Dynamics, Inc. ..... Corry ..... Pa
Aeroxec Industries Inc. Control Equip. Div. ..... Comly Ave. Greenwich ..... Conn
Aircraft Porous Media, Inc. ..... Glen Cove ..... NY
Allied Research Associates, Inc. ..... 43 Leon St. Boston 15 ..... Mass
Appleby & Ireland, Ltd. ..... Mark Lane, Basingstoke, Hants ..... Eng
AVIEN, INC. Adv Pg 184 ..... 35-15 Northern Blvd. Woodside 77 ..... NY
B-I-F Industries, Div. NT Air Brake Co. ..... 650-D Hanris Ave. Providence 1 ..... RI
BAILEY METER CO. Adv Pg 69 ..... 29801 Euclid Ave. Wickliffe ..... Ohio
Bailey Meter Co. Ltd. ..... 8010 St. Catherine St. W. Montreal, Que Can
Barton Instrument Corp. ..... 500 Monterey Pass Rd. Monterey Park ..... Cal
Bendix Corp-Bendix Pacific Div. ..... 11600 Sherman Way, N Hollywood ..... Cal
Black, Sivalls & Bryson, Inc. ..... 7800 E 12 St. Kansas City 38 ..... Mo
Bristol Co. ..... Box 1790 NHG, Waterbury 90 ..... Conn
Brooks Instrument Co. Inc. ..... 407 W Vine St. Hatfield ..... Pa
Calor Ltd., Francis ..... Africa House, Kingsway, London WC 2 ..... Eng
Carraron ..... 17 Bvd de la Liberation, St. Denis, Seine ..... Fr
CHANDLER EVANS CORP. Adv Pg 129 ..... Chester Oak Blvd. West Hartford ..... Conn
Consolidated Controls Corp. ..... 14 Bishop Ave. Bethel ..... Conn
Cordier-Wright Corp. Princeton Div. ..... Box 116, Princeton ..... NJ
Dietz Co. Inc., Henry G. ..... 23-16 Astoria Blvd. Long Island City 2 ..... NY
Dynatech Corp. ..... 600 Massachusetts Ave. Cambridge 39 ..... Mass
Eckardt AG, J. C. ..... Pragstr. 72/82, Stuttgart-bad Cannstatt ..... Ger
Electronic Meters Co. Ltd. ..... Abbey Rd. Park Royal, NW 10, London ..... Eng
Esso Pacific Div. Esso Resistor ..... 13502 S Weber Way, Hawthorne ..... Cal
Evershed & Vignoles, Ltd. Acton Lane Wks. ..... Chiswick, London W4 ..... Eng
Fischer & Porter Co. ..... 30 Warminster Rd. Warminster ..... Pa
Fisher Governor Co. ..... Box 207, Marshalltown ..... Iowa
Flow-Actuated Control Co. Inc. ..... 175-19 Park Row, New York 38 ..... NY
FOXBORO CO. Adv Pg 189 ..... 38 Neponset Ave. Foxboro ..... Mass
General Controls Co. ..... 801 Allen Ave, Glendale 1 ..... Cal
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 12 ..... 1 River Rd. Schenectady 5 ..... NY
HAGAN CHEMICALS & CONTROLS, INC.
Adv Pg 28 ..... Box 1348, Pittsburgh 30 ..... Pa
Hanna Engineering Works ..... 1707 Elston Ave. Chicago 22 Ill
Hays Corp. ..... Michigan City 40 ..... Ind
Hays Mfg. Co. ..... 814 W 13th St. Erie ..... Pa
Hollinger Machine Co. Ltd. ..... 8000 St. Urbain St. Montreal ..... Can
Honeywell Controls, Ltd. ..... Vandenhof Ave. Toronto, Ont Canada
Hydro Aire Co. Div. Cross Co. ..... 3000 Winona Ave, Burbank ..... Cal
Industrial Instruments Corp. ..... Drawer 7777, Austin ..... Tex
Infilco Inc. ..... Box 5032, Tucson ..... Ariz
Johnson Corp ..... 800 Wood St. Three Rivers ..... Mich
Jordan Controls Inc. ..... 2916 W Hampton Ave, Milwaukee 9 ..... Wis
Kates Co., W. A. ..... 430 Washington Rd. Deerfield Ill
Leeds & Northrup Co. ..... 4936 Stenton Ave, Phila 44 ..... Pa
Magnetal S.p.A. ..... Via L. Magini 7, Bologna ..... Italy
Marquardt Corp. ..... 16555 Saticoy St. Van Nuys ..... Cal
Marsh-Nuclear Div. of Worthington Corp. ..... Harwood ..... Mass
Mathieson Co. ..... 432 Paterson Plank Rd. E Rutherford ..... NJ
MINN-HONEYWELL REG CO. NUCL PRODS GROUP.
Adv. Pgs. 128, 240 ..... Wayne & Wesbite Avenues. Phila. 44 ..... Pa
New York Air Brake Co ..... 230 Park Ave. New York 17 ..... NY
Nuclear Research Corp ..... Southampton ..... Pa
Pall Corp. ..... Glen Cove ..... NY
Parker Aircraft Co ..... 5437 W Century Blvd, Los Angeles 45 ..... Cal
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 187 ..... Eindhoven ..... Neth
Power Aeronautical Corp. ..... Rosa-Rd, Dallas ..... NJ
Powertron Ultrasonics Corp. ..... Expwy. Ind. Pk. Plainview ..... NY
Pye, Ltd ..... St. Andrews Rd. Cambridge ..... Eng
Republic Flow Meter Co. ..... 2260 Diversey Pkwy. Chicago 47 Ill
Robertshaw-Fulton Controls Co., Aero & Test Div. ..... 401 N Manchester, Anaheim ..... Cal
Servomechanisms Inc. ..... 300 Aviation Blvd, El Segundo ..... Cal
Siemens & Halske AG ..... Hofmannstrasse, 50, Karlsruhe, Germany
Squires Co., C. E. ..... 18502 Syracuse Ave. Cleveland 10 ..... Ohio
Standard Tel. & Cables Ltd. ..... 29 Glasshouse Yd. London EC 1 ..... Eng
Taylor Instrument Cos. ..... 38 Acme St. Rochester 7 ..... NY
Telecomputing Corp. ..... 6155 Arno Dr. San Diego 11 ..... Cal
United Control Systems, Inc. ..... 918 Woodley Rd. Dayton 3 ..... Ohio
Wallace & Thomas, Inc. ..... 25 Main St. Belleville 9 ..... NJ
Wesson-Marlow Air Pump Co. ..... Marlow Bucks, England
Wann Regulator Co. ..... 10 Embankment St. Lawrence ..... Mass
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. DEPT.
Adv. Pgs. 70, 71 ..... Pittsburgh ..... Pa

CONTROLS—HUMIDITY
See Also GAGES—HUMIDITY

AEG, Adv Pg 113-A	Hanauer, Frankfurt/Main, Germany	
Allman Supply Co.	179-15 Jamaica Ave. Jamaica 30	NY
Allied Research Associates, Inc.	43 Leon St, Boston 15	Mass
Bendix Instrument Co. Inc.	8030 Georgia Ave, Silver Spring	Md
Atlas Technical, Inc.	1276 W 3 St, Cleveland 13	Ohio
Bendix Corp. Friez Instrument Div.	1454 Taylor Ave, Baltimore 4	Md
Bristol Co.	Box 1790 MRC, Waterbury 90	Conn
Cantron	Box 5884, Jacksonville 7	Fla
Cambridge Instrument Co., Ltd.	13 Grosvenor Pl, London SW1, Eng	
Dynatech Corp.	639 Massachusetts Ave, Cambridge 39	Mass
Eckardt AG, J. C.	Pragar, 72/88, Stuttgart-bad Cannstatt	Ger
FOXBORO CO. Adv Pg 189	38 Neponset Ave, Foxboro	Mass
GULSAN INSTRUMENT CO. Adv Pg 111	Box 11844, Chelsea	Mass
General Controls Co.	801 Allen Ave, Glendale 1	Cal
Honeywell Controls, Ltd.	Vanderhoof Ave, Toronto, Ont Canada	
Johnson Service Co.	Milwaukee 1	Wis
Kahl Scientific Instrument Corp.	Box 1148, El Cajon	Cal
Kahn & Co. Inc.	Box 518, Hartford 1	Conn
Leeds & Northrup Co.	4936 Stenton Ave, Phila 44	Pa
Loch & Co. Ltd., A. M.	Union St, Oldham, Lancs, England	
MINN-HONEYWELL REG CO. INDL PROCS GROUP, Adv. Pgs. 136, 240	Wayne & Hedgin Aves, Phila. 44	Pa
Negretti & Zambra (Canada) Ltd	4 Berthell Rd, Toronto 14	Ont
Parker Aircraft Co	5817 W Century Blvd, Los Angeles 45	Cal
Partlow Corp.	Dept. MRG-56, New Hartford	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 187	Eindhoven	Neth
Sordex, Inc.	13 Brookline Sq, Boston 14	Mass
Siemens & Halske AG	Hauptverwaltung, 80, Karlsruhe, Germany	
Simmonds Precision Products Inc.	105 White Plains Rd, Tarrytown	NY
Tapco Div. Thompson Ramo Wooldridge Inc.	23555 Euclid Ave, Cleveland 17	Ohio
Taylor Instrument Co.	38 Ames St, Rochester 1	NY
Weinlor Instruments Corp.	105 E Merrick Rd, Freeport	NY
Zeal Ltd., G. H.	Lombard Rd, London N4, London, London SW19	Eng

CONTROLS—LIQUID-LEVEL
See Also INDICATORS—LIQUID LEVEL

AEG, Adv Pg 113-A	Hanauer, Frankfurt/Main, Germany	
Acoustica Associates Inc.	10400 Aviation Blvd, Los Angeles 45	Cal
Aero-Flow Dynamics, Inc.	Corry	Pa
Assoc Industries Inc. Control Equip. Div.	Comly Ave, Greenwich	Conn
Appleby & Ireland, Ltd.	Mark Lane, Basingstoke, Hants	Eng
Assmann Corp.	940 Main St, Waltham	Mass
Automation Products, Inc.	2005 Miss Ray St, Houston 24	Tex
AVIBH, INC. Adv Pg 194	35-15 Northern Blvd, Woodside 77	NY
D-I-F Industries, Div. HT Air Brake Co.	5200-D Harris Ave, Providence 1	RI
E/W Controller Corp.	2200 E Maple Rd, Birmingham	Mich
BAILEY METER CO. Adv Pg 49	29801 Euclid Ave, Wickliffe	Ohio
Bailey Meter Co. Ltd.	6010 St. Catherine St, W, Montreal, Que Can	
Barton Instrument Corp.	580 Monterey Pass Rd, Monterey Park	Cal
BELBOUCHLEURE, Adv Pg 113-L	38 rue des Colonies, Brussels 1	Belg
Black, Sivalls & Bryson, Inc.	7000 E 12 St, Kansas City 26	Mo
Bristol Co.	Box 1790 MRG, Waterbury 90	Conn
Brooks Instrument Co. Inc.	407 W Vine St, Hatfield	Pa
Burndept Ltd.	West St, Erith, Kent, Eng	
Caird Ltd., Francis	Africa House, Kingsway, London WC2	Eng
Carsons	17 Bvd de la Libération, St-Denis, Reno	Fr
Consolidated Controls Corp.	14 Durant Ave, Bethel	Conn
Cutler-Hammer, Inc.	413 N 12th St, Milwaukee 1	Wis
Dieta Co. Inc., Henry G.	12-16 Astoria Blvd, Long Island City 5	NY
Dr. Vieu KG	20 Rosenhagweg, Bonn	Ger
Dynatech Corp.	639 Massachusetts Ave, Cambridge 39	Mass
Eckardt AG, J. C.	Pragar, 72/88, Stuttgart-bad Cannstatt	Ger
Fischer & Porter Co.	30 Warminster Rd, Warminster	Pa
FOXBORO CO. Adv Pg 189	38 Neponset Ave, Foxboro	Mass
HAGAN CHEMICALS & CONTROLS, INC. Adv Pg 20	Box 1346, Pittsburgh 30	Pa
Honeywell Controls, Ltd.	Vanderhoof Ave, Toronto, Ont Canada	
HONIWA INSTRUMENTS, INC. Adv Pg 207	Nakadachiuri Sanjo, Nakatiyu, Kyoto	Jap
Leeds & Northrup Co.	4936 Stenton Ave, Phila 44	Pa
Leeds & Northrup Ltd.	Broad St, Birmingham 19	Eng
Loch & Co. Ltd., A. M.	Union St, Oldham, Lancs, England	
MINN-HONEYWELL REG CO. INDL PROCS GROUP, Adv. Pgs. 136, 240	Wayne & Hedgin Aves, Phila. 44	Pa
Negretti & Zambra (Canada) Ltd	4 Berthell Rd, Toronto 14	Ont
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 187	Eindhoven	Neth
Pye & Co. Ltd., W. G.	Tark St, Cambridge, England	
Siemens & Halske AG	Hauptverwaltung, 80, Karlsruhe, Germany	
Special Instruments Lab, Inc.	212 W Vine Ave, Knoxville 01	Tenn
Taylor Instrument Co.	38 Ames St, Rochester 1	NY
THERMO ELECTRIC CO. INC. Adv Pg 208	Saddle Brook	NJ
Thompson, Ltd., John	Wolverhampton	Eng

CONTROLS—PRESSURE
See Also GAGES—PRESSURE

AEG, Adv Pg 113-A	Hanauer, Frankfurt/Main, Germany	
Aero-Flow Dynamics, Inc.	Corry	Pa
Assoc Industries Inc. Control Equip. Div.	Comly Ave, Greenwich	Conn
Aircraft Porous Media, Inc.	Glen Cove	NY
Allied Research Associates, Inc.	43 Leon St, Boston 15	Mass
Appleby & Ireland, Ltd.	Mark Lane, Basingstoke, Hants	Eng
Atlas Valve Co.	200 South St, Newark 5	NJ
D-I-F Industries, Div. HT Air Brake Co.	5200-D Harris Ave, Providence 1	RI
BAILEY METER CO. Adv Pg 49	29801 Euclid Ave, Wickliffe	Ohio
Bailey Meter Co. Ltd.	6010 St. Catherine St, W, Montreal, Que Can	
Bendix Corp-Bendix Pacific Div.	13000 Sherman Way, N Hollywood	Cal
Black, Sivalls & Bryson, Inc.	7000 E 12 St, Kansas City 26	Mo
Bristol Co.	Box 1790 MRG, Waterbury 90	Conn
Caird Ltd., Francis	Africa House, Kingsway, London WC 2	Eng
Cambridge Instrument Co., Ltd.	13 Grosvenor Pl, London SW1, Eng	
CHANDLER EVANS CORP. Adv Pg 130	Chester Oak Blvd, West Hartford	Conn
Consolidated Controls Corp.	14 Durant Ave, Bethel	Conn
Cutler-Hammer, Inc.	413 N 12th St, Milwaukee 1	Wis
Denver Fire Clay Co.	Box 5818, Denver 17	Colo
De Vilbiss Co.	300 Phillips Ave, Toledo 1	Ohio
Dieta Co. Inc., Henry G.	12-16 Astoria Blvd, Long Island City 5	NY
Dynatech Corp.	639 Massachusetts Ave, Cambridge 39	Mass
Eckardt AG, J. C.	Pragar, 72/88, Stuttgart-bad Cannstatt	Ger
Edison Ind., Thomas A., Instr. Div. McGraw-Edison Co.	40 Lakeside Ave, West Orange	NJ
Electrolle Motors Co. Ltd.	Abbey Rd, Park Royal, NW 10, London	Eng
Erie Pacific Div. Erie Resistor	13000 S Weber Way, Hawthorne	Cal
Evershed & Vignoles, Ltd. Acton Lane Wks.	Chiswick, London W4	Eng
Fielden Electronics Ltd.	Paxton Rd, Wythenshawe, Man 22, Eng	
Fischer & Porter Co.	30 Warminster Rd, Warminster	Pa
Fisher Governor Co.	Box 207, Marshalltown	Iowa
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
FOXBORO CO. Adv Pg 189	38 Neponset Ave, Foxboro	Mass
General Controls Co.	801 Allen Ave, Glendale 1	Cal
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
HAGAN CHEMICALS & CONTROLS, INC. Adv Pg 20	Box 1346, Pittsburgh 30	Pa
Hanna Engineering Works	1787 Elston Ave, Chicago 22	Ill
Hastings-Raydist Inc.	Newcomb Ave, Hampton	Va
Hays Corp.	Michigan City 40	Ind
Honeywell Controls, Ltd.	Vanderhoof Ave, Toronto, Ont Canada	
Industrial Instrument Corp.	Denver 777, Austin	Tex
Industrial Instruments Corp.	650 Ackerman Rd, Columbus 2	Ohio
Infitec Inc.	Box 5008, Tucson	Ariz
INSTOPE DEVELOPMENT LTD. Adv Pg 74	Bath Rd, Swindon, Reading, Berks	Eng
Johnson Corp.	800 Wood St, Three Rivers	Mich
Johnson Service Co.	Milwaukee 1	Wis
Jordan Controls Inc.	3225 W Hampton Ave, Milwaukee 8	Wis
Leeds & Northrup Co.	4936 Stenton Ave, Phila 44	Pa
Loch & Co. Ltd., A. M.	Union St, Oldham, Lancs, England	
MINN-HONEYWELL REG CO. INDL PROCS GROUP, Adv. Pgs. 136, 240	Wayne & Hedgin Aves, Phila. 44	Pa
Negretti & Zambra (Canada) Ltd	4 Berthell Rd, Toronto 14	Ont
New York Air Brake Co	230 Park Ave, New York 17	NY
Parker Aircraft Co	5817 W Century Blvd, Los Angeles 45	Cal
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 187	Eindhoven	Neth
Pye, Ltd	St. Andrews Rd, Cambridge	Eng
Republic Flow Meter Co.	2260 Diversey Pkwy, Chicago 47	Ill
Research Inc.	Box 6186, Edina Sta, Minneapolis 24	Minn
Robertshaw-Fulton Controls Co. Acco & Inst Div.	401 N Manchester, Anaheim	Cal
Robertshaw-Fulton Controls Co. Fulton Sylphon Div.	Box 400, Knoxville 1	Tenn
Ruggles-Klingemann Mfg. Co.	Salem	Mass
Save Co. Inc.	420 Madison Ave, New York 22	NY
Siemens & Halske AG	Hauptverwaltung, 80, Karlsruhe, Germany	
Simmonds Precision Products, Inc.	105 White Plains Rd, Tarrytown	NY
Squires Co., C. E.	18602 Syracuse Ave, Cleveland 10	Ohio
Taylor Instrument Co.	38 Ames St, Rochester 1	NY
Telecomputing Corp.	8120 Aero Dr, San Diego 11	Cal
THERMO ELECTRIC CO. INC. Adv Pg 208	Saddle Brook	NJ
Thompson, Ltd., John	Wolverhampton, England	
Wallace & Tiernan, Inc.	25 Main St, Belleville 9	NJ
Watts Regulator Co.	10 Embankment St, Lawrence	Mass
Weinlor Instruments Corp.	105 E Merrick Rd, Freeport	NY
WESTINGHOUSE ELEC. CO/DP. NUCLEAR CONTROL EQUIP. SECT. Adv. Pgs. 70, 71	Pittsburgh	Pa

CONTROLS—SPEED

A.E.I. Ltd.	25 Grosvenor Pl, London SW1, Eng	
Airpax Electronics Inc. Seminole Div.	Ft. Lauderdale	Fla
Allied Research Associates, Inc.	43 Leon St, Boston 15	Mass
ALLIS-CHALMERS MFG. CO. Adv. Pgs. 109-111	935 S 70th St, Milwaukee	Wis
Bowmar Instrument Corp.	8000 Bluffton Rd, Fort Wayne	Ind
Bristol Co.	Box 1790 MRG, Waterbury 90	Conn
CHANDLER EVANS CORP. Adv Pg 130	Chester Oak Blvd, West Hartford	Conn
Clark Controller Co.	1146 E 152 St, Cleveland 10	Ohio
Clayton Engineering Co	Orchard St, Crawley, Sussex	Eng
Consolidated Controls Corp.	14 Durant Ave, Bethel	Conn
Cutler-Hammer, Inc.	413 N 12th St, Milwaukee 1	Wis
Designers for Industry, Inc.	4341 Pulaski Pkwy, Cleveland 9	Ohio
Dynatech Corp.	639 Massachusetts Ave, Cambridge 39	Mass
Eckardt AG, J. C.	Pragar, 72/88, Stuttgart-bad Cannstatt	Ger
Erie Pacific Div. Erie Resistor	13000 S Weber Way, Hawthorne	Cal
Evershed & Vignoles, Ltd. Acton Lane Wks.	Chiswick, London W4	Eng
FOXBORO CO. Adv Pg 189	38 Neponset Ave, Foxboro	Mass
Gannet Corp.	5861 Sepulveda Blvd, Los Angeles 45	Cal
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
General Radio Co.	West Concord	Mass
HAGAN CHEMICALS & CONTROLS, INC. Adv Pg 20	Box 1346, Pittsburgh 30	Pa
Hamilton Standard Div. United Aircraft Corp.	Sect. 6, Bread Brook	Conn
Hanna Engineering Works	1787 Elston Ave, Chicago 22	Ill
Honeywell Controls, Ltd.	Vanderhoof Ave, Toronto, Ont Canada	
Hydro Aire Co. Div. Cons Co.	2000 Wisconsin Ave, Burbank	Cal
Jordan Controls Inc.	3225 W Hampton Ave, Milwaukee 8	Wis
Kahn & Co. Inc.	Box 518, Hartford 1	Conn
Leeds & Northrup Co.	4936 Stenton Ave, Phila 44	Pa
Leeds & Northrup Ltd.	Broad St, Birmingham 15	Eng
M. Ten Bosch, Inc.	80 Wheeler Ave, Pleasantville	NY

MINN-HONEYWELL REG CO. BOS. PRODS GROUP,		
Adv. Pgs. 126, 240	Wayne & Hadden Aves. Phila. 44	Pa
New York Air Brake Co	230 Park Ave, New York 17	NY
Chemin Mfg. Co.	8801 Stewart St. Skokie	Ill
Pye, Ltd	St. Andrews Rd, Cambridge	Eng
Scinky Bros. Inc.	4915 W 67th St, Chicago 38	Ill
Spectral Electronics Corp.	1704 S Del Mar Ave, San Gabriel	Cal
Superior Electric Co., The	383 Middle St, Bristol	Conn
Thayer Div. Thompson Ramo Wooldridge Inc.	13855 Euclid Ave, Cleveland 17	Ohio
THERMO ELECTRIC CO. INC.		
Adv Pg 209	Saddle Brook	NJ
United Control Systems, Inc.	916 Woodley Rd, Dayton 3	Ohio
Vero Inc.	2201 Walnut St, Garland	Tex
Weltronic Co.	19600 W 8 Mile Rd, Southfield	Mich
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. SECT.		
Adv. Pgs. 70, 71	Pittsburgh	Pa

CONTROLS—TEMPERATURE

ABB, Adv Pg 113-A	Mannheim, Frankfurt/Main, Germany	
Advanced Technology Labs.	185 Wilmot Rd, Mountain View	Cal
Aeronac Industries Inc. Control Equip. Div.	Candy Ave, Greenwich	Conn
Atkinson Accessories Corp.	1434 Chestnut Ave, Hillside 6	NJ
Allied Research Associates, Inc.	43 Leon St, Boston 15	Mass
American Instrument Co. Inc.	8030 Georgia Ave. Silver Spring	Md
Anderson Labs. Inc.	365 New Park Ave. West Hartford 15	Conn
Assembly Products, Inc.	75 Wilson Mills Rd, Chesterland	Ohio
Atlas Valve Co.	580 South St, Newark 5	NJ
AVCO, DYC, Adv Pg 184	2B-15 Hartman Blvd, Rochester 77	NY
B-I-F Industries, Div. NY Air Brake Co.	680-D Hamb Ave, Providence 1	RI
BAILEY METER CO. Adv Pg 69	29801 Euclid Ave, Wickliffe	Ohio
Bailey Meter Co. Ltd.	2050 St. Catherine St, W, Montreal, Que Can	
Black, Sivalls & Bryson, Inc.	7500 E 12 St, Kansas City 26	Mo
Bristol Co.	Box 1790 BBG, Waterbury 20	Conn
Boiling Instrument Co. Inc.	18 River Rd. Chatham	NJ
Bunnkept Ltd.	West St. Erith, Kent, Eng	
Cantron	Box 6004, Jacksonville 7	Fla
Caird Ltd., Francis	Africa House, Kingsway, London WC 2.	Eng
Cambridge Instrument Co., Ltd.	13 Grosvenor Pl, London SW1, Eng	
Consolidated Controls Corp.	34 Durant Ave, Bethel	Conn
Control Products, Inc.	500 Ridgedale Ave, E Hanover	NJ
Cox & Co. Inc.	115 E 23rd St, New York 10	NY
Cutler-Hammer, Inc.	422 N 12th St, Milwaukee 1	Wis
Daystrom Inc. Control Systems Div.	6455 Mildmar Rd, La Jolla	Cal
Degussa	Box 1003 Frankfurt/Main	Ger
Delta Design, Inc.	3102 Adams Ave, San Diego 16	Cal
Denver Fire Clay Co.	Box 6510, Denver 17	Colo
Designers for Industry, Inc.	4941 Fulton Pkwy, Cleveland 9	Ohio
Dietz Co. Inc., Henry G.	19-16 Astoria Blvd, Long Island City 5	NY
Dynatech Corp.	609 Massachusetts Ave, Cambridge 39	Mass
Electronics Corp. of America	1 Memorial Dr, Cambridge 42	Mass
Erie Pacific Div. Erie Resistor	13922 S Weber Way, Hawthorne	Cal
Farmer Electric Products Co. Inc.	2000 Washington St, Newton Lower Falls	Mass
General Controls Co.	801 Allen Ave, Glendale 1	Cal
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
Hayden Co., A. W.	556 N Elm St. Waterbury	Conn
Honeywell Controls, Ltd.	Vanderhoof Ave, Toronto, Ont Canada	
Industrial Timer Corp.	1497 McCarter Hwy, Newark 4	NJ
Leeds & Northrup Ltd.	Broad St, Birmingham 18	Eng
L'Electronique Appliquee	25 rue de Docteur Finlay, Paris 15	Fr
MINN-HONEYWELL REG CO. BOS. PRODS GROUP,		
Adv. Pgs. 126, 240	Wayne & Hadden Aves. Phila. 44	Pa
Norman Laboratories, Inc.	Williams Bay	Wis
Pye, Ltd	St. Andrews Rd, Cambridge	Eng
Robinson & Co. Ltd., D.	6 & 7 Church Rd, Richmond, Surrey	Eng
Sangamo Electric Co.	11 & Converse Sts, Springfield	Ill
Scinky Bros. Inc.	4015 W 67 St, Chicago 38	Ill
Spectral Electronics Corp.	1704 S Del Mar Ave, San Gabriel	Cal
Squires Co., C. E.	18502 Syracuse Ave, Cleveland 10	Ohio
Taylor Instrument Co.	20 Ames St, Rochester 1	NY
Trott Electronics, Inc.	422 Smith St, Rochester 8	NY
UNITED NUCLEAR CORP., Adv Pg 26	365 Winchester Ave. New Haven 4	Conn
Weltronic Co.	19600 W 8 Mile Rd. Southfield	Mich

CONTROLS—VACUUM
See Also VACUUM EQUIPMENT & ACCESSORIES

Allied Research Associates, Inc.	43 Leon St, Boston 15	Mass
Appleby & Ireland, Ltd.	Hall Lane, Basingstoke, Hants	Eng
BAILEY METER CO. Adv Pg 69	29801 Euclid Ave, Wickliffe	Ohio
Beckman Corp. Fluke Instruments Div.	1464 Taylor Ave. Baltimore 4	Md
Bristol Co.	Box 1790 BBG, Waterbury 20	Conn
Cambridge Instrument Co., Ltd.	13 Grosvenor Pl, London SW1, Eng	
Comflow Corp.	5100 Arch St. Philadelphia 3	Pa
Consolidated Controls Corp.	34 Durant Ave, Bethel	Conn
Cutler-Hammer, Inc.	422 N 12th St, Milwaukee 1	Wis
Delta Design, Inc.	3102 Adams Ave, San Diego 16	Cal
Dietz Co. Inc., Henry G.	19-16 Astoria Blvd, Long Island City 5	NY
Dynatech Corp.	609 Massachusetts Ave, Cambridge 39	Mass
Eckardt AG, J.C.	Pragar, 70/92, Stuttgart-bad Cannstatt	Ger
Edwards High Vacuum, Inc.	2879 Grand Island Blvd, Grand Island	NY
Evenhed & Vigneles, Ltd. Acton Lane Wm.	Chiswick, London W4	Eng
GELMAN INSTRUMENT CO. Adv Pg 258	Box 1106-C, Chelsea	Mich
General Controls Co.	801 Allen Ave, Glendale 1	Cal
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Eng. Co. (Radcliffe) Ltd.	Bury Rd, Radcliffe, Lancs	Eng
Hastings-Raydist, Inc. 1-3	Hampton Inn, Hampton	Va
Honeywell Controls, Ltd.	Vanderhoof Ave, Toronto, Ont Canada	
Ipsen Industries Inc.	Box 489, Rockford	Ill
Kahl Scientific Instruments Corp.	Box 1188, El Cajon	Cal
Leeds & Northrup Co.	4936 Stenton Ave, Phila 44	Pa
Mason-Neilan Div. of Worthington Corp.	Norwood	Mass
Matheson Co.	932 Paterson Plank Rd, E Rutherford	NJ
Milton, Inc.	3800 S W Macadam Ave, Portland 19	Ore
MINN-HONEYWELL REG CO. BOS. PRODS GROUP,		
Adv. Pgs. 126, 240	Wayne & Hadden Aves. Phila. 44	Pa
NRC EQUIPMENT CORP. NATIONAL RESEARCH CORP.		
Adv Pg 228	60 Charlemont St. Newton Highlands 61	Mass
National Research Corp	70 Memorial Dr, Cambridge 42	Mass
Nugent & Zambra (Canada) Ltd	4 Bentwell Rd, Toronto 16	Ont
New York Air Brake Co.	230 Park Ave, New York 17	NY
NUCLEAR CORP OF AMERICA, WST & CON DIV.		
Adv Pg 94	2 Hartwood Pl, Danville	NJ
Porter Aircraft Co	5817 W Century Blvd, Los Angeles 45	Cal
PHILCO CORP. LANSDALE TUBE DIV.		
Adv Pg 198	Church Rd. Lansdale	Pa
Robertshaw-Fulton Controls Co. Fulton Systems Div.	Box 400, Knoxville 1	Tenn
Siemens & Halske AG	Rheinbruckenstr. 50, Karlsruhe	Ger
Squires Co. C. E.	18502 Syracuse Ave, Cleveland 10	Ohio
Taylor Instrument Co.	20 Ames St, Rochester 1	NY
Trott Electronics, Inc.	422 Smith St, Rochester 8	NY
Ulmer Co., H. W.	2341 San Luis Rey Rd. Oceanside	Cal
Vacuum-Electronic Corp.	Terminal Dr, Plainview	NY
Vacuum Ind. Applications, Ltd.	Netherton Rd. Widnes, Lancashire	Scot
Vacuum Research (Cambridge) Ltd.	Quayside, Bridge St, Cambridge	Eng
Vacuum Specialties Inc.	34 Linden St, Somerville 5	Mass
Varian Associates	611 Hansen Way, Palo Alto	Cal
Wallace & Tiernan, Inc.	25 Main St, Belleville 9	NJ
Wann Regulator Co.	18 Embankment St, Lawrence	Mass
WELCH SCIENTIFIC CO. Adv Pg 192	1515 Sedgwick St. Chicago 10	Ill

CONTROLS—VISCOSITY

Automation Products, Inc.	2020 Mex Bay St, Houston 24	Tex
Bendix Corp. Cincinnati Div.	3130 Wasson Rd, Cincinnati 9	Ohio
Bristol Co.	Box 1790 BBG, Waterbury 20	Conn
Dynatech Corp.	609 Massachusetts Ave, Cambridge 39	Mass
Fischer & Porter Co.	20 Warminster Rd, Warminster	Pa
FOXBORO CO. Adv Pg 189	38 Neponset Ave. Foxboro	Mass
General Controls Co.	801 Allen Ave, Glendale 1	Cal
Honeywell Controls, Ltd.	Vanderhoof Ave, Toronto, Ont Canada	
Powertron Ultrasonics Corp.	Expwy, Ind. Pk, Plainview	NY

CONVERTERS—ANALOG-TO-DIGITAL, DIGITAL-TO-ANALOG

ABB, Adv Pg 113-A	Mannheim, Frankfurt/Main, Germany	
A.E.I. Ltd.	22 Grosvenor Pl, London SW1, Eng	
Acton Dyr Aerojet-General Corp	418 N Citrus Ave, Covina	Cal
Allied Research Associates, Inc.	43 Leon St, Boston 15	Mass
Armstrong Whitworth Equipment	Hucclecote, Gloucester	Eng
Automation, Inc. Div. C. W. Reed Co Inc.	1050 S Hoover, Los Angeles 44	Cal
Bailey Meter Co. Ltd.	5010 St. Catherine St. W, Montreal, Que Can	
Beckman Instruments Inc. Fluke Div.	5400 Harbor Blvd, Fullerton	Cal
Bell Telephone Mfg. Co.	35 Berkenrode, Hoboken/Antwerp	Belg
Bendix Corp-Bendix Pacific Div.	11600 Sherman Way, N Hollywood	Cal
Bendix Corp. Eclipse Pioneer Div.	Teterboro	NJ
Bendix Ericsson U.K. Ltd.	High Church St. New Basford, Nott.	Eng
Bryans Aeroquipment Ltd.	Willow Ln. Mitcham, Surrey	Eng
Chesapeake Instrument Corp.	Shadyside	Md
Clifton Precision Products Co. Inc.	1060 State Rd. Drexel Hill	Pa
Computer Control Co. Inc.	983 Concord St. Framingham	Mass
Computer Equipment Corp.	11612 Olympic Blvd. Los Angeles 64	Cal
Consolidated Electrodynamics Corp.	360 Sierra Madre Villa, Pasadena	Cal
Datex Corp.	1207 S Myrtle Ave, Monrovia	Cal
Daystrom Inc. Control Systems Div.	6455 Mildmar Rd, La Jolla	Cal
DEL ELECTRONICS CORP. Adv Pg 28	521 Hempstead Ave, Mt. Vernon	NY
Designers for Industry, Inc.	4941 Fulton Pkwy, Cleveland 9	Ohio
Digital Equipment Corp.	Maynard	Mass
Dymec Div. Hewlett-Packard Co.	395 Page Mill Rd. Palo Alto	Cal
Electro-Mechanical Research, Inc.	Box 3041, Sarasota	Fla
Electronic Associates, Inc.	Long Branch	NJ
Electronique & Automatisme, ste d'	Conflevoie Seine	Fr
Erie Pacific DIV. Erie Resistor	13922 S Weber Way, Hawthorne	Cal
Evenhed & Vigneles, Ltd. Acton Lane Wm.	Chiswick, London W4	Eng
Fabri-Tek Inc.	Box 646, Amery	Wis
Fernsehgeraete GMG	65-72 Johnst, Berlin-Steglitz	Germany
Fischer & Porter Co.	20 Warminster Rd. Warminster	Pa
FOXBORO CO. Adv Pg 189	38 Neponset Ave. Foxboro	Mass
FRANKLIN ELECTRONICS, INC.		
Adv Pg 220	E Fourth St. Bridgeport	Pa
General Dynamics/Electronics	100 Carlton Rd, Rochester 5	NY
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Radio Co.	West Concord	Mass
Guidance Controls Inc.	Hicksville	NY
HAMILTON ELECTRONICS CO. Adv Pg 252	Box 521, Princeton	NJ
Hewlett-Packard Co.	1501 Page Mill Rd, Palo Alto	Cal
Hilger & Watts, Ltd.	98 St. Pancras Way, London NW1, Eng	
Honeywell Controls, Ltd.	Vanderhoof Ave, Toronto, Ont Canada	
Hydro Aire Co. Div. Cons Co.	3000 Winona Ave, Burbank	Cal
Informatics Systems, Inc.	10331 National Blvd, LA 34	Cal
Instrument Development Labs, Inc.	67 Mechanic St, Attleboro	Mass
INSTRUTECHNIQUE S A, Adv Pg 113-B	81 rue Ecouffes, Boulogne/Billancourt, Seine	Fr
KEARFOTT DIV. GEN. PRECISION, INC.		
Adv Pg 229	1150 Belleville Ave. Little Falls	NJ
Keith Ltd., George	5 Lamell Rd, Don Mills	Ont
Leeds & Northrup Co.	4936 Stenton Ave, Phila 44	Pa
Librascope Div, Gen Precision, Inc.	Glendale 1	Cal
Link Div. - Gen. Precision, Inc.	Binghamton	NY
Litton Industries	336 N Foothill Rd, Beverly Hills	Cal
Lockheed Aircraft Corp.	Box 551 Burbank	Cal

Marian Instrument Co.	10001 Mislay Ave, Cleveland 5	Ohio
Mosley Co., F. L.	409 N Fair Oaks Ave, Pasadena	Cal
Navigation Computer Corp.	Valley Forge Ind Pk, Montgomery	Pa
Non-Linear Systems, Inc.	Del Mar Airport, Del Mar	Cal
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 107	Eindhoven	Neth
Pinney Harbenson Ltd.	Wooden Rd, Harbenson, England	
Porschke & Co. oHG	Box 2108, Frankfurt/Main 1, Germany	
Potter Aeronautical Corp.	Route 022, Union	NJ
Pye, Ltd	St. Andrews Rd, Cambridge	Eng
Racal Instruments Ltd.	Western Rd, Bracknell, Berks, England	
RADIATION COUNTER LABS. INC.		
Adv. Pgs. 02, 03	5122 W Grove St, Skokie	Ill
RADIATION INSTRUMENT DEVELOPMENT LAB.		
Adv. Pgs. 256, 2304-D	61 E Hueh Ave, Northbrook	Ill
RADIATION TECHNOLOGY, INC.		
Adv. Pg. 3rd Cover	457 Autumn St. NW, Atlanta 18	Ga
Reactron Research	Box 980, San Pedro	Cal
Raytheon Co, Communications & Data Processing Operation	1415 Boston-Providence Tpk, Norwood	Mass
Servomechanisms, Inc.	200 N Aviation Blvd, El Segundo	Cal
Siemens & Halske AG	Hofmannschaft, 55, Karlsruhe, Germany	
Solartron Electronic Group Ltd.	Victoria Rd, Farnborough, Hants, Eng	
Spacy Gyroscope Co, Div. Spacy Rand Corp.	Great Neck	NY
Standard Tel. & Cables Ltd.	10 Glasshouse Yd, London EC 1	Eng
Superior Electric Co., The	383 Middle St, Bristol	Conn
SYSTEMS ENGINEERING LAB. INC.		
Adv Pg 198	Box 9148, Fort Lauderdale	Fla
Systron-Donner Corp.	900 Gallinde St, Concord	Cal
Telechrome Mfg. Corp.	185 Dixon Ave, Amityville	NY
Telecomputing Corp.	6155 Aero Dr, San Diego 11	Cal
Tesla Electronics Co. Inc.	Wilton	Conn
Vernon Electronics Ltd.	Kingston By-Pass, New Malden, Surrey	Eng
Wang Laboratories	23 Hunt Dr, Natick	Mass

CONVERTERS—ROTARY

A.E.I. Ltd.	33 Grosvenor Pl, London SW1, Eng	
ALLIS-CHALMERS MFG. CO.		
Adv. Pgs. 108-111	900 S 70th St, Milwaukee	Wis
Dustgoon for Industry, Inc.	4941 Fulton Pkwy, Cleveland 9	Ohio
Forges & Ateliers de Const. Electriques de Jeumont	5 pl. Rio-de-Janeiro, Paris 8e	Fr
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
Lenoh Corp.	10405 Sonora Rd, Compton	Cal
Oerlikon Engineering Co.	Zurich 50, Switzerland	
Sangamo Electric Co.	11 & Converse Sts, Springfield	Ill
Telechrome Mfg. Corp.	185 Dixon Ave, Amityville	NY

CONVERTERS—TIME-TO-PULSE HEIGHT
See ANALYZERS—TIME-OF-FLIGHT

COOLANTS—REACTOR
See Specific Metal Under METALS, ALLOYS & COMPOUNDS
MODERATORS—ORGANIC
WATER—HEAVY

COOLING TOWERS

American Air Filter Co.	215 Central Ave, Louisville 8	Ky
American-Standard Industrial Div.	Detroit 32	Mich
Chiyoda Chemical Eng. & Const. Co Ltd	1-30, Hibiya-Hibiyakai, Minato-Ku, Tokyo, Japan	
Dunham-Bush, Inc.	179 Lindt St, West Hartford 10	Conn
Dynatech Corp.	000 Massachusetts Ave, Cambridge 39	Mass
Fluor Products Co.	Box 1207, Santa Ana	Cal
FOSTER WHEELER CORP. Adv Pg 130	666 5th Ave, New York 19	NY
Horton Steel Works, Ltd.	16 Adelaide St. W, Toronto	Can
Mosley Co.	222 W Gregory Blvd, Kansas City 14	Mo
Midland Heating & Ventilation Co. Ltd.	Bedford St, Birmingham 11, England	
Pritchard & Co., J. F.	4835 Roanoke Pkwy, Kansas City	Mo
Reinforcer Corp.	Woodland Rd, Rowland	NJ
RUNNSTAHL AG, Adv Pg 113-F	Neuhauser Str. 20, Wetzar-Amoor	Ger
Thompson, Ltd., John	Wolverhampton	Eng
Tosi, S.p.A., Franco	Legnano, Milan	Ital
Vosges pour le Traitement des Eaux, S.A	1 Quai des Vennes, Liège	Belg

CORE STRUCTURALS—REACTOR

Advanced Technology Labs.	300 Whisman Rd, Mountain View	Cal
Alco Products, Inc.	Box 1005, Schenectady 5	NY
ALLIS-CHALMERS MFG. CO.,		
Adv. Pgs. 108-111	900 S 70th St, Milwaukee	Wis
Atomics International Div. NAA	Box 309, Canoga Park	Cal
Auxi-Atomo	11 rue de la Pepinière, Paris 8e	Fr
AVERY & IAIN, CO., Adv Pg 73	110 Bridge Ave, Cambridge	Mass
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St, New York 17	NY
Babcock & Wilcox Ltd.	209 Euston Rd, London NW 1, England	
Barnes Co., W. F. & John	301 S Water St, Rockford	Ill
BELGONUCLEAIRE, Adv Pg 113-L	25 rue des Colonies, Brussels 1	Belg
Canadian Westinghouse Co. Ltd.	Box 510, Hamilton, Ontario, Canada	
Combustion Engineering, Inc.	100 Madison Ave, New York 16	NY
D-RESSER PRODUCTS, INC. Adv Pg 200	Grant Burlington	Mass
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
EX-CELLO CORP. ATOMICS DIV.		
Adv. Pgs. 8, 9	1200 Oakman Blvd, Detroit 32	Mich
Fean Mfg. Co.	100 Penn Rd, Hamington	Conn
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
FOSTER WHEELER CORP. Adv Pg 130	666 5th Ave, New York 19	NY
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
Hitachi, Ltd.	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
I. & S Machine Co. Inc.	Box 317, R. D. 3, Latrobe	Pa
Lockheed Aircraft Corp. Georgia Div.	1000 Northside Dr. NW, Atlanta 18	Ga
Marvel-Schebler Products Div. Borg-Warner Corp.	5200 S Zwin Rd, Decatur	Ill
Moore, Glover & Hensley, Inc.	Box 052, Perth	Pa
National Forge Co	Irvine, Warren 2239	Pa
NATIONAL LEAD CO. Adv. Pgs. 60, 61	111 Broadway, New York 6	NY
NERATOMA, N. V., Adv Pg 113-F	Hoofdstraat 20, The Hague	Neth
NEWBRIDGE MACHINE CORP., Adv Pg 93	Silver Creek	NY
Nuclear Metals, Inc.	Box 220 Concord	Mass
Nuenning-Gass-Prader AG	Hirmetsriegs Haupt. 30, Vienna 7	Aus
Salmo Bros. Ltd.	Wimmelbar	Swit
Tapco Div. Thompson Ramo Wooldridge Inc.	23555 Euclid Ave, Cleveland 17	Ohio
UNITED NUCLEAR CORP., Adv Pg 26	303 Westcoatre Ave, New Haven 4	Conn
Vickers-Armstrongs (S. Marine) Ltd.	Seldon, Wiltshire, England	

CORES—REACTOR
See Also FUEL ELEMENTS

Advanced Technology Labs.	300 Whisman Rd, Mountain View	Cal
Alco Products, Inc.	Box 1005, Schenectady 5	NY
Atomics International Div. NAA	Box 309, Canoga Park	Cal
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St, New York 17	NY
Babcock & Wilcox Ltd.	209 Euston Rd, London NW 1, England	
Babcock-Lima-Hamilton Corp.	Dept. H 8, Philadelphia 40	Pa
BELGONUCLEAIRE, Adv Pg 113-L	25 rue des Colonies, Brussels 1	Belg
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.		
Adv Pg 202	Box 608, San Diego 12	Cal
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
Gesellschaft f. Chemische Ind.	Erlangen	Germ
Hitachi, Ltd.	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
MARTIN CO. NUCLEAR DIV. Adv Pg 5	Baltimore 3	Md
NATIONAL LEAD CO. Adv. Pgs. 60, 61	111 Broadway, New York 6	NY
Nuclear Metals Inc.	Box 220 Concord	Mass
Salmo Bros. Ltd.	Wimmelbar	Swit
SYLCOR DIV. SYLVANIA ELEC PRODS. INC.		
Adv Pg 30	Carthage Road Rd, Hicksville	NY
UNITED NUCLEAR CORP., Adv Pg 26	303 Westcoatre Ave, New Haven 4	Conn
WESTINGHOUSE ELEC. CORP. ATOMIC FUEL DEPT.		
Adv. Pgs. 131 & 70, 71	Cleveland	Pa

COUNTER GASES
See GASES—COUNTER

COUNTERS—BINARY OR DECADE
See SCALERS—BINARY
SCALERS—DECADE
SCALING TUBES—DECADE

COUNTERS—ELECTROMECHANICAL, DIRECT-READING

ABB, Adv Pg 113-A	Nuernberg, Frankfurt/Main, Germany	
A.E.I. Ltd.	33 Grosvenor Pl, London SW1, Eng	
Abrams Instrument Corp.	000 E Shiawassee St, Lansing	Mich
Aveley Electric, Ltd.	E. Orinsdon, Essex, England	
Bell Telephone Mfg. Co.	32 Berkenrode, Hoboken/Antwerp	Belg
Beckman Instruments, Inc.	11000 Sherman Way, N Hollywood	Cal
Beckman Corp-Beckman Portable Div.	Fullerton	Cal
Beckman Corp. Bridge Pioneer Div.	6600 Buffton Rd, Fort Wayne	Ind
Bowmar Instrument Corp.	1401 Old County Rd, Belmont	Cal
California Tech. Ind. Div. Textron Inc.	Waterbury St, Baldwin Locks, Eng	
Carter & Co. Ltd., R. & F., Albion Wks.	1300 N Buffum St, Milwaukee 1	Wis
Dumont Mfg. Co.	60 & Upland Ave, Phila 40	Pa
Electric Tachometer Corp.	55-71 Johnson, Berlin-Britz, Germany	
Fernsprechgerate GMC.	001 Allen Ave, Glendale 1	Cal
General Controls Co.	2103 S Cypress Ave, Fullerton	Cal
General Nuclear Corp.	500 N Elm St, Waterbury	Conn
Haydon Co., A. W.	1-4-chome Marunouchi, Chiyoda-ku, Tokyo	Jap
Hitachi, Ltd	45 W 45 St, New York 36	NY
LANDIS & GYR, INC. Adv Pg 64	55 rue de Docteur Finlay, Paris 15, Fr	
L'Electronique Appliquee	Glendale 1	Cal
Lifescope Div. Gen. Precision, Inc.	Box 501 Burbank	Cal
Lockheed Aircraft Corp.	Box 106, Princeton	NJ
Mercier Instrument Corp.	1000 Marlowe Ave, Cleveland 6	Ohio
MERATOMA, N. V., Adv Pg 113-F	Hoofdstraat 20, The Hague	Neth
Nuclear-Electronics Corp.	5000 N Broad St, Philadelphia 20	Pa
Nuclear Enterprises (GB) Ltd.	Sighthill, Edinburgh 11	Scot
Pesco Equipment, Ltd.	Wolverhampton Road Beeston, Nottingham	Eng
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 107	Eindhoven	Neth
Potter Aeronautical Corp.	Route 022, Union	NJ
Pennie Co. Inc.	3014 Broadway, Santa Monica	Cal
Racal Instruments Ltd.	Western Rd, Bracknell, Berks, England	
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	663 Hamish Rd, Lynbrook	NY
RADIATION TECHNOLOGY, INC.		
Adv. Pg. 3rd Cover	457 Autumn St. NW, Atlanta 18	Ga
Reactron Research	Box 980, San Pedro	Cal
Reeves-Soniac Electronics Components, Inc.	2147 Hamilton Ave, Cleveland 14	Ohio
Robotomics Enterprises, Inc.	2402 E Indian School Rd, Phoenix 16	Ariz
S. A. I. P.	50 Rue Gabriel Crie, Malakoff, Seine	Fr
SELO	Via Tendoni 17, Milan	Ital
Siemens-Reiniger-Werke AG	Leipziger, 45, Erlangen	Ger
Special Instruments Laboratory, Inc	122 W Vine Ave, Knoxville 03	Tenn
Streamwinner Co.	Grayslake	Ill
SYSTEMS ENGINEERING LAB. INC.		
Adv Pg 198	Box 9148, Fort Lauderdale	Fla
TECHNICAL ASSOCIATES, Adv Pg 235	140 N Fremlands Ave, Burbank	Cal
TECHNICAL MEASUREMENT CORP.		
Adv Pg 63	441 Washington Ave, North Haven	Conn
Telecomputing Corp.	6155 Aero Dr, San Diego 11	Cal
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 113-C	240 W 17th St, New York 11	NY
Telechrome Mfg. Corp.	185 Dixon Ave, Amityville	NY
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 113-C	240 W 17th St, New York 11	NY
Trent Electronics, Inc.	413 Smith St, Rochester 8	NY
Vendor-Rent, Inc.	70 Sargent St, Hartford 5	Conn

COUNTERS—ELECTROMECHANICAL, PRINTING

Aveley Electric, Ltd.	E. Orinsdon, Essex, England	
Baldwin Industrial Controls	Dartford, Kent	Eng
Bell Telephone Mfg. Co.	32 Berkenrode, Hoboken/Antwerp	Belg
California Tech. Ind. Div. Textron Inc.	1401 Old County Rd, Belmont	Cal
General Controls Co.	001 Allen Ave, Glendale 1	Cal
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
LANDIS & GYR, INC. Adv Pg 64	45 W 45 St, New York 36	NY
L'Electronique Appliquee	55 rue de Docteur Finlay, Paris 15, Fr	
Lifescope Div. Gen. Precision, Inc.	Glendale 1	Cal
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 107	Eindhoven	Neth
Potter Aeronautical Corp.	Route 022, Union	NJ
Pennie Co. Inc.	3014 Broadway, Santa Monica	Cal
Radio Corp. of America Industrial Electronic Prods.	Front & Cooper Sts, Camden 5	NJ
Solartron Electronic Group Ltd.	Victoria Rd, Farnborough, Hants	Eng
Streamwinner Co.	Grayslake	Ill
Telechrome Mfg. Corp.	185 Dixon Ave, Amityville	NY
Victor Adding Machine Co.	3900 N Rockwell St, Chicago 18	Ill

COUNTERS—ELECTRONIC
See SCALERS

COUNTERS—PULSE

Abrams Instrument Corp.	000 E Shiawassee St, Lansing	Mich
Allis Co., Louis	427 E Stewart St, Milwaukee 7	Wis
American Trader Corp. Sub. ESCO Electronics, Ltd.	36-01 38th St, Long Island City 6	NY
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,		
Adv Pg 113-G	Charleroi	Belg
Bell Telephone Mfg. Co.	32 Berkenrode, Hoboken/Antwerp	Belg
Beckman Instruments U.K. Ltd.	High Church St, New Brighton, Wirral	Eng
Bowmar Instrument Corp.	6000 Buffton Rd, Fort Wayne	Ind
Boland Co.	Box 1790 MBG, Waterbury 20	Conn
California Tech. Ind. Div. Textron Inc.	1401 Old County Rd, Belmont	Cal
COSMIC RADIATION LABS. INC.		
Adv Pg 3rd Cover	1640 Hanauk Hwy, Bellport	NY
Dr. Vinn KG	20 Bonnbaugweg, Bonn	Ger
Dynac, Div. Hewlett-Packard Co.	396 Page Mill Rd, Palo Alto	Cal
EBERLINE INSTRUMENT CORP.		
Adv Pg 115	Box 279, Santa Fe	Wis
General Controls Co.	001 Allen Ave, Glendale 1	Cal
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
General Nuclear Corp	2103 S Cypress Ave, Fullerton	Cal
General Radio Co.	West Concord	Mass
HAMMER ELECTRONICS CO. Adv Pg 252	Box 221, Princeton	NJ
Haydon Co., A. W.	500 N Elm St, Waterbury	Conn
INTERTECHNIQUE S.A. Adv Pg 113-H	87 rue Escudier, Boulogne/Billancourt, Seine	Fr
Kolm Kogyo Corp.	1-3 Washizuma-Dori, Hyogo-ku, Kobe	Jap
Lab. Prof. Dr. R. Berthold	12 Calmbacherstr. Wildbad im Schwarzwald	Ger
LANDIS & GYR, INC. Adv Pg 64	45 W 45 St, New York 36	NY
L'Electronique Appliquee	55 rue de Docteur Finlay, Paris 15	Fr
Lifescope Div. Gen. Precision, Inc.	Glendale 1	Cal
Lockheed Aircraft Corp.	Box 501 Burbank	Cal
Mercier Instrument Corp.	1000 Marlowe Ave, Cleveland 6	Ohio
MERATOMA, N. V., Adv Pg 113-F	Hoofdstraat 20, The Hague	Neth
Nuclear-Electronics Corp.	5000 N Broad St, Philadelphia 20	Pa
Nuclear Enterprises (GB) Ltd.	Sighthill, Edinburgh 11	Scot
Pesco Equipment, Ltd.	Wolverhampton Road Beeston, Nottingham	Eng
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 107	Eindhoven	Neth
Potter Aeronautical Corp.	Route 022, Union	NJ
Pennie Co. Inc.	3014 Broadway, Santa Monica	Cal
Racal Instruments Ltd.	Western Rd, Bracknell, Berks, England	
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	663 Hamish Rd, Lynbrook	NY
RADIATION TECHNOLOGY, INC.		
Adv. Pg. 3rd Cover	457 Autumn St. NW, Atlanta 18	Ga
Reactron Research	Box 980, San Pedro	Cal
Reeves-Soniac Electronics Components, Inc.	2147 Hamilton Ave, Cleveland 14	Ohio
Robotomics Enterprises, Inc.	2402 E Indian School Rd, Phoenix 16	Ariz
S. A. I. P.	50 Rue Gabriel Crie, Malakoff, Seine	Fr
SELO	Via Tendoni 17, Milan	Ital
Siemens-Reiniger-Werke AG	Leipziger, 45, Erlangen	Ger
Special Instruments Laboratory, Inc	122 W Vine Ave, Knoxville 03	Tenn
Streamwinner Co.	Grayslake	Ill
SYSTEMS ENGINEERING LAB. INC.		
Adv Pg 198	Box 9148, Fort Lauderdale	Fla
TECHNICAL ASSOCIATES, Adv Pg 235	140 N Fremlands Ave, Burbank	Cal
TECHNICAL MEASUREMENT CORP.		
Adv Pg 63	441 Washington Ave, North Haven	Conn
Telecomputing Corp.	6155 Aero Dr, San Diego 11	Cal
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 113-C	240 W 17th St, New York 11	NY

TRACERLAB, INC. Adv. Pgs. 124, 172-6 — 1601 Trapelo Rd. Waltham 54 — Mass
Tree Electronics, Inc. — 415 Smith St. Rochester 8 — NY
Vee Inc. — 8501 Walnut St. Garland — Tex
Vesper Electronics Ltd. — Kingston By-Pass, New Malden, Surrey — Eng
VICTOREEN INSTRUMENT CO.,
Adv. Pg. 4th Cover — 5821-31 Hough Ave. Cleveland 3 — Ohio
Walker Co. — 14821 S La Cienega Blvd. LA 45 — Cal

COUNTERS—RADIATION

See Also CHAMBERS—FISSION
CHAMBERS—IONIZATION
DETECTORS—BURST-SLUG
DOSIMETERS—RADIATION
GAGES—THICKNESS OR DENSITY, RADIOACTIVITY
GASES—COUNTER
GEIGER-MULLER TUBES
MONITORS—RADIATION
PHOTOMULTIPLIER TUBES
SAMPLE CHANGERS
SCINTILLATORS
WINDOWS—COUNTER

1. ALPHA
2. BETA
3. FLOW
4. GAMMA
5. NEUTRON
6. PROBING, MEDICAL
7. PROPORTIONAL
8. SCINTILLATION
9. SEMICONDUCTOR DETECTORS
10. X-RAY
11. WHOLE-BODY

A.E.I. Ltd. 1-9-4 — 59 Gunnersbury Pl. London SW1, Eng
Aerojet-General Nucleonics, 9 — Box 77, San Ramon — Cal
Allied Research Associates, Inc. 1-4-
9-10 — 43 Leon St. Boston 15 — Mass
AMERICAN NUCLEAR CORP. 1-3-3-4-5-6-7-8-9,
Adv Pg 198 — Box 428, Oak Ridge — Tenn
AMPEREX ELECTRONIC CORP., 1-2-3-4-5-6-7-10,
Adv Pg 65 — 230 Duffy Ave. Hicksville — NY
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, 1-3-3-4-5-7-8-10,
Adv Pg 112-0 — Charleroi — Belg
Atomcomm-Bendix Corp. 1-3-5-6-8-
7-8-10 — 111 W Jewel Ave. St. Louis 22 — Mo
Atomics, Inc. Div. C. W. Reed Co Inc.
4-8 — 5960 S Hoover, Los Angeles 44 — Cal
ATOMIC ACCESSORIES, INC. 1-2-3-4-5-6-7-8-9-10,
Adv Pg 206 — 671 W Merrick Rd. Valley Stream — NY
Atomic Devel. & Marketing Corp.
1-3-4-8 — 15-04 120 St. College Point 56 — NY
Atomic Info Sub. Corp. 1 — 1000 Clarmont Ave. Berkeley 5 — Cal
Atomkom Corp. 1-2-3-4-7-10 — 960 Main St. Waltham — Mass
Avo Ltd. 4 — 58-66 Vauxhall Bridge Rd. London, SW1 — Eng
B & K Labs. Ltd. 3 — 4 Tilney St. Park Ln. London W1 — Eng
BARD-ATOMIC INC. 1-3-5-6-7-8,
Adv Pg 87 — 23 University Rd. Cambridge 38 — Mass
Beckin Edmonds U.K. Ltd. 1-3-8 — High Church St. New Romney, Kent — Eng
Berwick Associates, Inc. 1-2-3-4-6-7-
8-10 — 150 E 42nd St. New York 22 — NY
Bestobell Ltd. 1-2-4-5-6-8 — West St. Erith, Kent, Eng
CONTROLS FOR RADIATION, INC. 9
Adv Pg 189 — 130 Alewife Brook Pkwy. Cambridge 40 — Mass
Curtis Harbour Corp. 4-6-8-10 — 1845 W 135th St. Gardena — Cal
D.L.S.I. Nuclear Corp. 1-3-5-6-8-
7-8 — Via A. Sanfelici 20, Milan — Ital
Dr. Wim BG — 29 Sarnbergweg, Bonn — Ger
Dual Electronics Ltd. 1-3-4-6 — Hayes, Middlesex — Eng
EBERLINE INSTRUMENT CORP. 1-3-4-5-8
Adv Pg 213 — Box 239, Santa Fe — Mex
EGGERTON, SEMMENHAUSEN & GRIER, INC. 4-5-8
Adv Pg 185 — 168 Brookline Ave. Boston 15 — Mass
EMCO ELECTRONICS LTD. AMERICAN TRADAIR CORP. 8,
Adv Pg 279 — Southampton-Ins. Essex — Eng
ELECTRONIC ASSOCIATES, LTD. 1-2-4-8,
Adv Pg 27 — 4856 Yango St. Willamalin, Ore — Ore
Equipment Atomico Brasileiro Ltda. 1-8-
3-4-7-8 — Box 9084, Rio de Janeiro — Bras
Fabbrini, Mosse & Co. 1-3-4 — 100 Eastern La. Yonkers — NY
FORBO SCIENTIFIC CO. 2-3, Adv Pg 234 — 633 Lincoln St. Evanston — Ill
FRANKLIN SYSTEMS, INC. 3-5-4-5-6-8,
Adv Pg 236 — 2724 Hillsboro Rd. W Palm Beach — Fla
FRAZAR & HANSEN LTD. Adv Pg 172-E — 301 Clay St. San Francisco — Cal
FRIESEKE & HOEPFNER GMBH. 1-2-3-4-6-7-8,
Adv Pg 113-N — Erlangen-Bruck — Ger
GELMAN INSTRUMENT CO. 1-3-4,
Adv Pg 233 — Box 1119-H, Chelsea — Mich
General Dynamics/Fort Worth, 9-8-9 — Box 748 Fort Worth 1 — Tex
GENERAL ELECTRIC CO. APPARATUS SALES, 4-5-7-8,
Adv. Pgs. 11, 13 — 1 River Rd. Schenectady 5 — NY
GENERAL MEASUREMENTS, 3-5-6,
Adv Pg 28 — 18 Rutland Ave. Gainesville — NY
General Nuclear Corp. 1-2-3-4-5-6-7-8,
General Nuclear Corp. 2-7-8 — 2800-4 6th Ave. New York 30 — NY
GAMMEX ELECTRONICS CO. 1-3-5-6-7-8-9-10,
Adv Pg 212 — Box 391, Princeton — NJ
HARSHAW CHEMICAL CO. 1-3-4-5-6-8-9-10,
Adv Pg 89 — 1945 E 97th St. Cleveland 6 — Ohio
Hilger & Watts, Ltd. 7-8 — 98 St. Pancras Way, London NW1 — Eng
Hitachi, Ltd. 1-10 — 1-4-Jonan Marunouchi, Chiyoda-ku,
Tokyo — Jap

HORIBA INSTRUMENTS, INC. 8,
Adv Pg 207 — Nakashimatsuki Sanjo, Nakatsyo, Kyoto — Jap
INSTRUMENT & DEVELOPMENT PRODS CO. 1-2-3-4-5-10,
Adv Pg 204 — 366 N 10th St. Chicago — Ill
Instrumen Inc., 4 — Box 606, Tulsa — Okla
INTERTECHNIQUE S.A. 1-2-3-4-5-8,
Adv Pg 172-H — 61 rue Escudier, Boulogne/Billancourt, Seine — Fr
INTOPE DEVELOPMENTS LTD. 1-2-3-4-5-6-10,
Adv Pg 91 — Bath Rd. Sandons, Reading, Berks — Eng
ISOTOPES INC. 1-2-3-7-8, Adv Pg 192 — 123 Woodland Ave. Westwood — NJ
Ital Electronics S.p.A. 3-4-8 — Via Ignazio Pentenrugo 92, Roma — Ital
JOHNSON & ASSOCIATES, INC. WILLIAM R. 1-2-3-4-5-6-7-8-9,
Adv Pg 226 — Box 415, Hacienda Lakes — NJ
JOHNSTON LABS. INC. WILLIAM H. 1-2-3-4-5-7-8,
Adv Pg 188 — 3615 Woodland Ave. Baltimore 12 — Md
Kahl Scientific Instrument Corp. 1-3-
6-8 — Box 1108, El Cajon — Cal
KAMAN NUCLEAR, 8, Adv. Pgs. 190, 191 — Garden of the Gods Rd. Colo Springs — Colo
Kobe Kogyo Corp. 1-3-5-6-8-9-10 — 1-6 Wakayama-Dori, Hyogo-ku, Kobe — Jap
LAB Central de Telecommunications, 1-3-
4-8 — 46 rue de Bretonell, Paris 8e — Fr
Lab. Prof. Dr. H. Berthold, 1-2-3-4-5-7-
8-10 — 75 Calmbachstrasse, Wildbad im Schwarzwald — Ger
LAMB-AIR INC. DIV. DYNALECTRON INC. 1-6,
Adv Pg 204 — 7444 W Wilson Ave. Chicago 31 — Ill
LANDSVERK ELECTROMETER CO. 1-2-4-8,
Adv Pg 216 — 645 Sonora ave. Glendale 1 — Cal
L'Electronique Appliquee 1-3-3-4-5-6-7
LEMMEL ELECTRONIC LABS. 1-2-4-5-6-7,
Adv Pg 216 — 1320 Flushing Ave. Brooklyn 37 — NY
Lockheed Aircraft Corp., 1-2-3-4-5-6-7-
8-9 — Box 551, Burbank — Cal
M.B.L.E. 7 — 60 Rue des Deux Gares, Brussels 7 — Belg
MERLIN, INC., GERHARD T. 1-2-3-5-6-8,
Adv Pg 182 — 132 Nassau St. New York 38 — NY
Minds Research Laboratory, 4-8 — 1027 Bay Rd. East Palo Alto — Cal
MITEX, INC. 4-8-11, Adv Pg 30 — Box 225, Deerfield — Ill
Miles Hivolt Ltd. 1-2-3-4-6-7-8 — Old Greenham Rd. Newbury-by-Sea, Essex — Eng
Mitchell Radiation Products Corp. 10 — E Washington St. Hazleton — Pa
Nash & Thompson Ltd. 1-2-3-4-5-8 — Hook Rise S, Tolworth, Surbiton, Surrey — Eng
NERATOM, N. V., 1-2-3-4-5-6-7-8,
Adv Pg 112-F — Noordeinde 30, The Hague — Neth
NUCLEAR-CHICAGO CORP. 1-2-3-4-5-6-7-8-10,
Adv. Pgs. 36-37 — 333 E Howard Ave. Des Plaines — Ill
NUCLEAR CORP OF AMERICA, MCP & CDN DIV. 1-2-3-4-5-6-7-8-10,
Adv Pg 94 — 2 Bloomfield Pl. Danville — NJ
Nuclear Development Lab. Inc. 1-2-4-
2-3-7-10 — Box 9084, Kansas City — Mo
Nuclear-Electronics Corp. 1-2-4-7-8, — 5006 N Broad St. Philadelphia 20 — Pa
Nuclear Enterprises (GB) Ltd. 1-2-3-4-
5-6-8-10 — Sighthill, Edinburgh 11 — Scot
NUCLEAR ENTERPRISES LTD. 1-2-3-4-5-7-8,
Adv Pg 194 — 109 Bury St. Winnipeg 27 — Man
NUCLEAR HEADQUARTERS CORP. 1-2-3-4-7-8,
Adv Pg 237 — 3400 N Arlington Ave. Indpls. 18 — Ind
Nuclear Research Applications Ltd. 1-2-
3-4-5-8 — Bell St. Reigate (Surrey) — Eng
NUCLEONIC CORP OF AMERICA, 1-2-4-5-7-8-10,
Adv Pg 202 — 146 Wagner St. Brooklyn 21 — NY
OAK RIDGE TECHNICAL ENTERPRISES CORP. 1-2-3-4,
Adv Pg 229 — Box 2204, MDGCI, Oak Ridge — Tenn
Ohio Nuclear Inc. 1-2-3-4-5-6-7-8 — 17195 Knickerbocker Rd. Cleve 40 — Ohio
Olmont Corp. 4-10 — 2206 Sugan St. Cincinnati 52 — Ohio
PACKARD INSTRUMENT CO. INC. 1-2-3-4-7-8,
Adv. Pgs. 84, 85 — Box 428, La Grange — Ill
Pecon Equipment, Ltd. 1-3-4-8 — Heinz-Scope Ind Estate, Redhill, Surrey — Eng
Pneumatic Ltd. 3 — 54 Princes St. Hanover Sq. London W1 — Eng
Philips Electronic Instruments, 1-3-4-5-7
8-10 — 750 S Fairview Ave. Mt. Vernon — NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. 1-2-3-4-5-6-7-8-10,
Adv Pg 107 — Eindhoven — Neth
Picker X-Ray Corporation, 1-5-6-8-9-
6-7-8-10 — 1275 Mamaroneck Ave., White Plains — NY
PILOT CHEMICALS, INC. 1-2-3-4-5-8,
Adv Pg 237 — Dept. H, 26 Pleasant St. Watertown 72 — Mass
Plessey Nucleonics Ltd. 5-6-8-7 — Vernon Rd. Northampton — Eng
Prescision & Co. oHG, 1-2-3-4-5-7-8 — Box 2206, Frankfurt/Main 1 — Ger
Quartz & Silice, S. A. 8 — 8 rue d' Anjou, Paris — Fr
RCA Victor Co Ltd, 1-2-3-4-5-8 — 1001 Lenoir St. Montreal 30 — PQ
RADIATION COUNTER LABS. INC. 1-2-3-4-5-6-7-8-9-10-11,
Adv. Pgs. 82, 83 — 5132 W Grove St. Skokie — Ill
RADIATION EQUIP. & ACCESSORIES CORP. 1-2-3-4-5-7-8-9-10,
Adv. Pg. 3rd Cover — 663 Hendrick Rd. Lyndhurst — NY
RADIATION INSTRUMENT DEVELOPMENT LAB. 1-2-4-5-7-8-10,
Adv. Pgs. 216, 218A-D — 45 E North Ave. Northlake — Ill
RADIATION TECHNOLOGY, INC. 1-4-5-7-8,
Adv. Pg. 3rd Cover — 807 Antone St. NW, Atlanta 18 — Ga
Radio Corp. of America Industrial
Electronic Prod. 7-8-10 — Front & Cooper Sts. Camden 6 — NJ
Radiochemistry, Inc. 1-2-4-7-8 — 1111 W St. Catherine St. Louisville 10 — Ky
RADIOTECHNIQUE, LA, 9, Adv Pg 172-B — 130 rue Ledru-Rollin, Paris 11e — Fr
RADTRON CHEMICAL CO. INC. 1-8,
Adv Pg 12 — 161 E 42nd St. New York 17 — NY
Reuter-Stokes Electronics Components,
Inc. 6-7 — 5240 Hamilton Ave. Cleveland 14 — Ohio
S.A.I.P. 2-3-7-8-10 — 38, Rue Gabriel Crie, Malakoff, Seine — Fr
SELO, 3-9 — Via Tendenza 57, Milan — Ital
Semi-Elements Inc. 1-3-5-6-8-10 — Saxonburg Blvd. Saxonburg — Pa
Sorro Nuclear Corp. 7 — 69-01 Austin Blvd. Long Island City — NY
SHARP LABORATORIES, INC. 1-2-8,
Adv Pg 69 — Box 1202, La Jolla — Cal

Siemens & Halske AG 1-2-3-4-5-7-8-10 — Hauptverwaltung, 55, Karlstraße, Germany
Siemens-Reiniger-Werke AG, 1-2-3-4-
6-7-8-10 — Leipziger, 65, Erlangen — Ger
SOLID STATE RADIATIONS, INC. 1-2-3-4-5-8-10
Adv Pg 211 — 2301 E Grandline Ave. LA 54 — Cal
TECHNICAL ASSOCIATES, 1-3-4-6-7-8,
Adv Pg 235 — 140 N Providencia Ave. Burbank — Cal
TECHNICAL MEASUREMENT CORP. 1-3-4-8,
Adv Pg 63 — 461 Washington Ave. North Haven — Conn
Telectronic Mfg. Corp. 1-2-4-5-8-10 — 186 Dixon Ave. Amityville — NY
TERMINAL RADIO INTERNATIONAL LTD. 1-2-3-4-5-6-7-8-10,
Adv Pg 113-C — 140 W 17th St. New York 11 — NY
Texas Instruments Incorporated,
Components Div. — Box 5012, Dallas 22 — Tex
Texas Nuclear Corp. 9 — Box 9267, Allandale Sta. Austin 17 — Tex
TOKYO SHIBAURA ELECTRIC CO. LTD.
1-3-4-5-8-9, Adv Pg 225 — 12 Yanda-cho 1-Chome, Chiyoda-ku, Tokyo — Jap
TRACERLAB, INC. 1-2-3-4-6-7-8-10,
Adv. Pgs. 124, 172-3 — 1601 Trapelo Rd. Waltham 54 — Mass
Transmuclear Corp. 2 — 120 Woodland Ave. Westwood — NJ
UNC Canney Electronics Ltd. 1-2-3-4-5
6-7-10 — King Henry's Dr. New Addington, Croydon, Surrey — Eng
U. S. NUCLEAR CORP. 1-2-3-4-5-6-10,
Adv Pg 127 — 401 N Lake St. Box 2022, Burbank — Cal
Universal Consumer Products Corp. 1-2-4-
10 — 380 Orb St. Copiague — NY
Victoreen Instruments Co. 1-2-4-8 — Box 1121, Grand Junction — Colo
Vanguard Instrument Co. 2 — Box 946, LaGrange — Ill
VICTOREEN INSTRUMENT CO. 1-2-3-4-5-6-7-8-10,
Adv. Pg. 4th Cover — 5821-31 Hough Ave. Cleveland 3 — Ohio
WESTINGHOUSE ELECTRIC CORP. ELECTRONIC TUBE DIV. 3-7,
Adv Pg 194 — Box 284, Elmira — NY
WIND COUNTER LABORATORY, 8, 1-2-4-7-8,
Adv Pg 138 — 1335 E 53rd St. Chicago 15 — Ill
X-Ray Dept. of General Electric Co. 1-
9-6-10 — 4855 Electric Ave. Milwaukee — Wis

COUNTERS—RATE

See METERS—COUNTING-RATE

COUNTING-RATE METERS

See METERS—COUNTING-RATE

COUNTING TUBES

See SCALING TUBES—DECADE

COUPLINGS

See Also BELLOWS & EXPANSION JOINTS
1. FLEXIBLE
2. HOSE
3. PIPE
4. QUICK-DISCONNECT
5. RIGID
6. SELF-SEALING
7. SHAFT

Aero Research Instrument Co. Inc. 4 — 116 N Aberdeen St. Chicago 7 — Ill
Aeroquip (Canada), Ltd. 4-6 — 597 Bridgeland Ave. Toronto 18, Ontario — Can
Aeroquip Corp. 3-4-6 — 200 S East Ave. Jackson — Mich
Aeroquip - Marman Div. — 13114 W Exposition Blvd. L A 66 — Cal
Amarcast Corp. 3 — 3000 Firestone Blvd. South Gate — Cal
American Instrument Co. Inc. 4 — 8030 Georgia Ave. Silver Spring — Md
BTR Industries Ltd. 1-5-8 — Vincent Sq. London, SW1 — Eng
Bonnie Corp. Inc. 8 — 700 Liberty Ave. Union — NJ
Cairn Ltd., Francis, 1-3-6 — Abbey House, Kingsway, London WC 2. — Eng
CAMBRIDGE INSTRUMENT CO. 3
Adv Pg 230 — 100 Pacific St. Cambridge — Mass
Cross Co. Ind. Prods Div. 2 — 4300 S Kedzie Ave. Chicago 32 — Ill
CRAWFORD FITTING CO. 4-5, Adv Pg 23 — 884 E 140 St. Cleveland 10 — Ohio
Croll-Reynolds Engineering Co. 1-3 — 1132 Main St. Stamford — Conn
De Vilbiss Co. 2-4 — 300 Phillips Ave. Toledo 3 — Ohio
Dunnipps & Fittings, Ltd. 2-5 — 96 Kingsway, London, WC2 — Eng
Enerlac, Ltd. 4-6 — Macintell Ln. Corsham, Somerset — Eng
Flight Refuelling Inc. — Box 1701, Baltimore 3 — Md
Flight Refuelling Ltd., 1-4-6 — Tarrant Rushton Airfd.
Hendford, Dorset — Eng
General Electric Co. Ltd. of England — Erith, Kent, England
Hallett Mfg. Co. 4 — 5710 Bowcroft St. Los Angeles 16 — Cal
HYDROSYNE CORP. 1-3-5, Adv Pg 139 — 7300 Coldwater Canyon Ave. N. Hollywood — Cal
Imperial-Eastman Corp. 3 — 6500 W Howard St. Chicago 48 — Ill
John-Morrille, 3 — 22 E 40th St. New York 16 — NY
Kalamazoo Bus. Co. 7 — 13 A Monroe St. Tres Rivers — Wis
Kaylerte Hydraulics Ltd. 3 — Allesley, Coventry, Warwickshire — Eng
Kidde & Co. Inc., Walter, 4 — 577 Main St. Bellevile 9 — NJ
Kopkins Mfg. Div. Schupan Tech.
Prods. Inc. 1-5 — 2150 Ryan St. Hughsonton — NY
Lord Mfg. Co. 7 — 1000 W 12 St. Erie — Pa
OH MARK COUPLINGS, 1-3-4-5-6,
Adv Pg 75 — 4448 Tank Blvd. L.A. 41 — Cal
Parker Aircraft Co. 4-5-6 — 5407 W Century Blvd. Los Angeles 45 — Cal
Philadelphia Gear Corp. 1-4-5-7 — King of Prussia — Pa
Polypanco Ltd. 3 — Tonks Rd. Welwyn Garden City, Herts — Eng
Precision Mechanisms Corp. 7 — 44 Brooklyn Ave. Westbury — NY
Sophomer-Manhattan, Inc. 1 — Arnold & Hagel Sts. Meadville — Pa
Resistoflex Corp., 1-6 — Woodland Ind. Roseland — NJ
Simmonds-Fokker Controls Co. Fokker
Equipment Div. 1 — Box 600, Knoxville 1 — Tenn
Silverman Rubber Co., Ltd. 1-5-8 — Vincent Sq. London SW1 — Eng

Standard-Thomson Corp., 1	100 Grove St, Waltham 54	Mass
STEWART CORP., F. W. 1-J, Adv Pg 227	4011 Beverwood Ave, Chicago 13	Ill
Thermocouple Products Inc. 6	901 N Irwe St, Villa Park	Ill
Tosi, S.p.A., Franco, 3	Legnano, Milan	Ital
Tube Investments Ltd. 1-E	Aster Manor, Birmingham 6	Eng
Wade, Couplings, Ltd., 3-4	270 High Rd, Ilford, Essex	Eng
WIGGINS OIL TOOL CO. INC., E. B., 3-3-4-5-6, Adv Pg 207	3484 E Olympic Blvd, Los Angeles 23	Cal
Whitaker Hall & Co. (1959) Ltd. 1	Radcliffe, Manchester	Eng

CRANES

Babcock & Wilcox Ltd.	209 Euston Rd, London NW 1, England	
Baldwin-Lima-Hamilton Corp.	Dept N B, Philadelphia 42	Pa
CPC ENGINEERING CORP. Adv Pg 216	Box 36, Stoddrige	Mass
Harnischfeger Corp.	4600 W National Ave, Milwaukee 46	Wis
Robbins & Myers, Inc.	1345 Lagonda Ave, Springfield	Ohio
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Rd G. Clemenceau, Courbevoie, Seine	Fr
Whiting Corp.	157 & Ledrup Sts, Harvey	Ill

CRITICAL ASSEMBLIES
See REACTORS

CRITICAL EXPERIMENTS
See SERV. & CONS'LT: CRITICAL EXPERIMENTS

CRITICALITY-HAZARD EVALUATION
See SERV. & CONS'LT: CRITICALITY-HAZARD EVALUATION

CRUCIBLES—INDUSTRIAL

American Metal Products Co.	6050 Lincoln Ave, Detroit 4	Mich
Atomics International Div. NAA	Box 309, Canoga Park	Cal
Corning Glass Works, Shielding Radiation	Corning	NY
Degussa	Box 2003 Frankfurt/Main	Ger
Electro-Ceramics, Inc.	3946 S 2 W, Salt Lake City 15	Utah
Electro Refractories & Abrasives Corp.	364 Delaware Ave, Buffalo 2	NY
Engelhard Industries, Inc.	113 Astor St, Newark 2	NJ
GREAT LAKES CARBON CORP. Adv Pg 101	10 E 40th St, New York	NY
Laboratory Equipment Corp.	St. Joseph	Mich
NATIONAL LEAD CO. Adv. Pgs. 00, 01	111 Broadway, New York 6	NY
Nonmet Corp.	1436 S 3rd St, St. Louis 60	Mo
Savoie-Achson, Cie Industrielle	10 rue de General Foy, Paris 8e	Fr
Sassenberg Ceramics, Inc.	Box 157, Sassenberg	Pa
SHOWA DENKO K. K., Adv Pg 112-G	34 Shiba Hyogoro-cho, Minato-ku, Tokyo	Jap

CRYOGENIC APPARATUS

American Instrument Co. Inc.	8030 Georgia Ave, Silver Spring	Md
Atomic Life Sci. Corp.	3040 Claremont Ave, Berkeley 5	Cal
Bell Telephone Mfg. Co.	53 Berkenrode, Hoboken/Antwerp	Belg
Beckle Corp. Pioneer-Central Div.	Davenport	Iowa
CHANDLER EVANS CORP. Adv Pg 139	Charter Oak Blvd, West Hartford	Conn
Compudyne Corp.	406 E Northampton Rd, Hatboro	Pa
Cooper-Bessemer Corp.	Mount Vernon	Ohio
Cryogenic Eng. Co.	2502 W 40th St, Denver 16	Colo
Dynatech Corp.	639 Massachusetts Ave, Cambridge 39	Mass
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
Garrett Corp.	9851 Sepulveda Blvd, Los Angeles 45	Cal
General American Transportation Corp.	135 S LaSalle St, Chicago 3	Ill
Graver Tank & Mfg. Co. Div. Union Tank Car Co.	30 E Wacker Dr, Chicago 1	Ill
HARVEY-WELLS NUCLEAR CORP. Adv Pg 201	43 Kendall St, Framingham	Mass
Horton Steel Works, Ltd.	55 Adelaide St, W, Toronto	Ont
HYDROTHYNE CORP. Adv Pg 128	7200 Coldwater Canyon Ave, N. Hollywood	Cal
LINDE CO. DIV. UCC, Adv Pg 135	270 Park Ave, New York 17	NY
Lockheed Aircraft Corp.	Box 551, Burbank	Cal
Minnesota Life Inc	101 Mill Lane, Mountainside	NJ
Modern Lab. Equipment Co. Inc.	1011 1st Ave, New York 22	NY
Motherwell Bridge & Engrg. Co. Ltd.	Box 4, Motherwell, Scotland	
NATIONAL ANNEALING BOX CO. Adv Pg 104	Box 520, Washington	Pa
NERATOM, N. V., Adv Pg 173-F	Noordeinde 30, The Hague	Neth
NEWBERRY MACHINE CORP., Adv Pg 93	Silver Creek	NY
Parker Aircraft Co	5817 W Century Blvd, Los Angeles 45	Cal
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 107	Eindhoven	Neth
Pittsburgh-Des Moines Steel Co.	Neville Island, Pittsburgh 25	Pa
Powertron Ultrasonics Corp.	Expwy, Ind. Pk, Plainview	NY
STEARNS-ROGER MFG. CO. Adv Pg 52	Box 5888, Denver 17	Colo
Sulzer Bros, Ltd.	Winterthur	Switz
Superior Air Products Co.	132 Malvern St, Newark 5	NJ
Texas-Sonics, Inc.	Box 2018, Lexington 73	Mass
Tubescrib Inc.	1845 S Myrtle Ave, Monrovia	Cal
Vacuum Research (Cambridge) Ltd.	Quersole, Bridge St, Cambridge	Eng
Wheeler Mfg. Co. C. R.	1850 Shirley Ave, Philadelphia 32	Pa
York Corp.	Eastern Rd, York	Pa

CRYSTALS—SCINTILLATION
See SCINTILLATORS—CRYSTAL

CYCLOTRONS
See Under ACCELERATORS

DATA-PROCESSING EQUIPMENT
See Also COMPUTER ACCESSORIES
COMPUTERS—ANALOG
COMPUTERS—DIGITAL

AEG, Adv Pg 172-A	Hauptstr, Frankfurt/Main, Germany	
Automatics Div. North Amer. Aviation	8100 E Imperial, Downey	Cal
BAILEY METER CO. Adv Pg 69	29801 Euclid Ave, Wickliffe	Ohio
Bailey Meter Co, Ltd.	5010 St. Catherine St, W, Montreal, Que	Can
Beckman Instruments Inc. Systems Div.	2400 Harbor Blvd, Fullerton	Cal
Bell Telephone Mfg. Co.	53 Berkenrode, Hoboken/Antwerp	Belg
Beltrick Instrument Corp.	112-03 14th Ave, College Point 56	NY
Beckle Computer Div. Beckle Corp.	5630 Arbor Vitae St, Los Angeles 45	Cal
Beckle Corp Beckle Pacific Div.	13000 Sherman Way, N Hollywood	Cal
Beckle Telemeter U.K. Ltd.	High Church St, New Basford, Nott.	Eng
Bristol Co.	Box 1790 BBG, Waterbury 20	Conn
Bryans Accoupliment Ltd.	Willow Ln, Mitcham, Surrey	Eng
California Tech. Ind. Div. Textron Inc.	1401 Old County Rd, Belmont	Cal
Computer Control Co. Inc.	983 Concord St, Framingham	Mass
Computer Systems Inc.	Culver Rd, Monmouth Junction	NJ
Consolidated Electrodynamics Corp.	1307 Sierra Madre Villa, Pasadena	Cal
Control Data Corp.	501 Park Ave, Minneapolis 15	Minn
Daystrom Inc. Control Systems Div.	4455 Mitchner Rd, La Jolla	Cal
Designers for Industry, Inc.	4041 Fulton Pkwy, Cleveland 9	Ohio
Digital Equipment Corp.	Maynard	Mass
Dynac Div. Hewlett-Packard Co.	395 Page Mill Rd, Palo Alto	Cal
Electro-Mechanical Research, Inc.	Box 3041, Sarasota	Fla
Electronic Associates, Inc.	Long Branch	NJ
Electronique & Automatisme, ste d'	Courbevoie Seine	Fr
Engelhard Industries, Inc.	113 Astor St, Newark 2	NJ
Engis Equipment Co.	431 S Dearborn St, Chicago	Ill
Faint-Tek Inc.	Box 946, Amery	Wis
Fermont Electric, Inc	Industrial Pk. #1, Plainview	NY
Fermont-Packard Electric Ltd.	Industry St, Toronto 18, Ontario, Canada	
Fischer & Porter Co.	50 Warminster Rd, Warminster	Pa
GPL DIV. GENERAL PRECISION INC. Adv Pg 120	63 Bedford Rd, Pleasantville	NY
General Applied Science Labs. Inc.	Merrick & Stewart Ave, Westbury	NY
General Dynamics/Astronautics	Box 1128, San Diego 12	Cal
General Dynamics/Electronics	1307 Carlson Rd, Rochester 3	NY
General Dynamics/Fort Worth	Box 748 Fort Worth 1	Tex
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 12	1 River Rd, Schenectady 5	NY
Gerber Scientific Instrument Co.	Box 305, Hartford	Conn
GILLIBRAND Instrument Co. Inc.	Box 7002, Oakland 1	Cal
HBM-Singer, Inc.	Schoene Pk, Box 60, South College	Pa
Hallamore Electronics Div.	714 Brookhaven St, Anaheim	Cal
HAMMER ELECTRONICS CO. Adv Pg 212	Box 521, Princeton	NJ
Hilger & Watts, Ltd.	98 St. Pancras Way, London NW 1, Eng	
Hogan Faximile Corp. Sub. Telautograph Corp.	326 Greenwich St, New York 14	NY
Honeywell Electronic Data Processing Div	60 Walnut St, Wellesley Hills 81	Mass
Information Systems, Inc.	10131 National Blvd, LA 34	Cal
INTERNATIONAL BUSINESS MACHINES CORP., Adv. Pgs. 60, 61	122 E Post Rd, White Plains	NY
LAND-AIR INC. SUB. DYNALECTRON INC. Adv Pg 204	7464 W Wilson Ave, Chicago 31	Ill
Leach Corp.	10435 Susana Rd, Compton	Cal
Leeds & Northrup Co.	4901 Stenton Ave, Phila 44	Pa
Librascope Div. Gen Precision, Inc.	Glendale 1	Cal
Litton Industries	336 N Foothill Rd, Beverly Hills	Cal
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
MAN-HONEYWELL AEG CO. SUB. PHILCO GROUP, Adv. Pgs. 136, 140	Wayne & Walnite Aves. Phila. 44	Pa
Monitor Systems Inc.	Dept. 7, Ft. Wash. Ind. Pk. Ft. Wash.	Pa
Moseley Co., F. L.	409 N Fair Oaks Ave, Pasadena	Cal
National Cash Register Co.	Main & K Sts, Dayton	Ohio
Navigation Computer Corp.	Valley Forge Ind Pk, Norristown	Pa
Perkin-Elmer Corp. Electro-Optical Div.	5670 E Washington Blvd, L A 22	Cal
Philco Corp. Govt. & Ind. Gr.	4700 Wissahickon Ave, Phila 44	Pa
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 107	Eindhoven	Neth
Pye, Ltd	St. Andrews Rd, Cambridge	Eng
RADIATION COUNTER LABS. INC. Adv. Pgs. 82, 83	5122 W Grove St, Skokie	Ill
Raytheon Nuvacit	Box 2876, San Pedro	Cal
Raytheon Co. Communication & Data Processing Operation	1415 Boston-Providence Tpk, Norwood	Mass
Rese Engineering, Inc.	A & Courtland, Philadelphia 20	Pa
Royal-McBee Corp.	850 3rd Ave, New York 22	NY
Siemens & Halske AG	Rheinbrueckenstr. 50, Karlsruhe	Ger
Solartron Electronic Group Ltd.	Victoria Rd, Farnborough, Hants, Eng	
Southern Instruments, Ltd.	Frimley Rd, Camberley, Surrey	Eng
Sperry Gyroscope Co. Div. Sperry Rand Corp.	Great Neck	NY
Standard Tel. & Cables Ltd.	59 Glasshouse Yd, London EC 1	Eng
Sylvania Electronic Systems	40 Sylvan Rd, Waltham 54	Mass
SYSTEMS ENGINEERING LAB. INC. Adv Pg 198	Box 9145, Fort Lauderdale	Fla
Systron-Donner Corp.	888 Galindo St, Concord	Cal
TRG, Inc	2 Aerial Way, Syosset	NY
Telechrome Mfg. Corp.	185 Dixon Ave, Amityville	NY
Telecomputing Corp.	6125 Aero Dr, San Diego 11	Cal
Telecro Industries Corp.	35-16 37th St, LIC 1	NY
Trak Electronics Co. Inc.	Wilton	Conn
Venner Electronics Ltd.	Kingston By-Pass, New Malden, Surrey	Eng
Victor Adding Machine Co.	3900 N Rockwell St, Chicago 18	Ill
Wang Laboratories	12 Huron Dr, Natick	Mass

DEAERATORS

Advanced Technology Labs.	369 Whisman Rd, Mountain View	Cal
Alco Products, Inc.	Box 1005, Schenectady 5	NY
ALLIS-CHALMERS MFG. CO., Adv. Pgs. 109-111	1126 S 70th St, Milwaukee	Wis
Aqua-Chem, Inc.	259 N Grand Ave, Waukesha	Wis
Chem-Pure Service Co.	702 Industrial Rd, San Carlos	Cal
Corlagene Corp.	2134 17th St, Philadelphia 32	Pa
Condenser Service & Engrg. Co. Inc.	150 Observer Hwy, Hoboken	NJ
ELGIN SOFTENER CORP. Adv Pg 116	179 N Grove Ave, Elgin	Ill
General Eng. Co. (Radcliffe) Ltd.	Bury St, Radcliffe, Lancs.	Eng
Graver Water Conditioning Co.	216 W 14 St, New York 11	NY
Infilco, Inc.	Box 5033, Tucson	Ariz
Maryland Shipbuilding & Drydock Co	Box 1027, Baltimore 3	Md
NERATOM, N. V., Adv Pg 173-F	Noordeinde 30, The Hague	Neth
Permutit Co. Div. Pfaudler Permutit Inc.	50 W 44th St, New York 36	NY
Powertron Ultrasonics Corp.	Expwy, Ind. Pk, Plainview	NY
Thermax, Ltd., Adm	Wolverhampton, England	
Tosi, S.p.A., Franco	Legnano, Milan	Ital
Vennes pour le Traitement des Eaux, S A	1 Quai des Vennes, Liège	Belg
Whitlock Mfg. Co.	97 South St, W Hartford	Conn
WORTHINGTON CORP. Adv. Pg. 2nd Cover	401 Washington Ave, Harrison	NJ

DECADE SCALERS
See SCALERS—DECADE
SCALING TUBES—DECADE

DECONTAMINANTS—CHEMICAL

Acme Labs.	1180 Raymond Blvd, Newark 2	NJ
Borwick Associates, Inc	130 E 63rd St, New York 22	NY
Buchler & Co.	Frankfurter Str. 294 Braunschweig, Ger	
California Corp for Biochemical Research	2625 Medford St, Los Angeles 63	Cal
Dow Chemical Co.	Midland	Mich
HAZAN CHEMICALS & CONTROLS, INC. Adv Pg 23,	Box 1346, Pittsburgh 30	Pa
Kohlmann, Ets.	25 bd de l'Amiral-Bruix, Paris 16e	Fr
Nuclear Decontamination Corp	132 Warren St, Apollo	Pa
NUCLEONIC CORP. OF AMERICA, Adv Pg 202	796 Dupont St, Brooklyn 21	NY
Oakite Products, Inc.	19 Rector St, New York 6	NY
PFIZER & CO. INC., CHARLES, Adv Pg 117	333 E 42nd St, New York 17	NY
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	663 Nortick Rd, Lyndonvl	NY
Sandler Chemical Co.	100 Medison Ave, New York 17	NY
TURCO PRODUCTS, INC. Adv Pg 139	Box 1033, Wilmington	Cal
ULTRASONIC INDUSTRIES, INC. Adv Pg 66	Acme Co. Engr. Hill, Plainview	NY

DECONTAMINATING EQUIPMENT

Adams Co. Inc., R. P.	475 E. Park Dr. Buffalo 17	NY
American Laundry Machinery Industries,	Iron & Berkshire Aves, Cincinnati 12	Ohio
American Sterilizer Co.	Box 620, Erie	Pa
ATOMIC ACCESSORIES, INC. Adv Pg 205	611 W Nortick Rd, Valley Stream	NY
Beckle Corp. Pioneer-Central Div.	Davenport	Iowa
Borwick Associates, Inc	130 E 63rd St, New York 22	NY
CARBORUNDUM FILTER CORP. Adv Pg 137	738 Erie Blvd. E, Box 1268, Syracuse 1	NY
Carbonnaire Enterprise & Chemicpure	8 Pl. des Etats-Unis, BP61, Montrouge, Seine	Fr
Chem-Pure Service Co.	702 Industrial Rd, San Carlos	Cal
Chiyoda Chemical Eng. & Const. Co Ltd	1-36, Shiba-Hirakawa, Minato-Ku, Tokyo, Japan	
D. I. S. I. Nuclear Corp.	Via A. Scotoni 20, Milan	Ital
Farrel-Birmingham Co. Inc.	Ansonia	Conn
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
HELMAN INSTRUMENT CO. Adv Pg 233	Box 116-H, Chelsea	Mich
HAYS DRINKING FAUCET CO. Adv Pg 46	1439 Fourth St, Berkeley 10	Cal
Nuclear Decontamination Corp	132 Warren St, Apollo	Pa
Pacific Valves, Inc.	2801 Walnut Ave, Long Beach	Cal
Powertron Ultrasonics Corp.	Expwy, Ind. Pk, Plainview	NY
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	663 Nortick Rd, Lyndonvl	NY
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Rd G. Clemenceau, Courbevoie, Seine	Fr
Tennant Co, G. H.	701 N Lilac Dr, Minpls 22	Minn
TRACERLAB, INC. Adv. Pgs. 134, 173-E	1601 Trapelo Rd, Waltham 54	Mass
TURCO PRODUCTS, INC. Adv Pg 139	Box 1033, Wilmington	Cal
ULTRASONIC INDUSTRIES, INC. Adv Pg 66	Acme Co. Engr. Hill, Plainview	NY
Vapor Blast Mfg. Co.	3885 W Atkinson Ave, Milwaukee 9	Wis
Vennes pour le Traitement des Eaux, S A	1 Quai des Vennes, Liège	Belg

DECONTAMINATION
See SERV. & CONS'LT: DECONTAMINATION

DEHUMIDIFIERS
See Also AIR-CONDITIONING UNITS

A. E. L. Ltd.	32 Grosvenor Pl, London SW1, Eng	
Aldous Supply Co.	179-16 Jamaica Ave, Jamaica 32	NY
Air & Refrigeration Corp.	420 Madison Ave, New York 17	NY
Airflow Co.	600 S Monument Ave, Baltimore	Md
American Air Filter Co.	215 Central Ave, Louisville 8	Ky
American-Standard Industrial Div.	Detroit 32	Mich

Atlantic Research Corp.	Alexandria	Va
Buffalo Forge Co.	400 Broadway, Buffalo 5	NY
Cannon	Box 5884, Jacksonville 7	Fla
Canadian Westinghouse Co. Ltd.	Box 510, Hamilton, Ontario, Canada	
Carrier Air Conditioning Co.	Carrier Pkwy, Syracuse 1	NY
Chiyoda Chemical Eng. & Const. Co. Ltd	1-30, Shiba-Shinbashi, Minato-Ku, Tokyo, Japan	

CONTROLLED ATMOSPHERE ENCLOSURES AND CO

Adv Pg 30	Leonard Air Base, Marianna	Fla
Gannett Corp.	8861 Sepulveda Blvd, Los Angeles 45	Cal
Kahn & Co. Inc.	Box 516, Hartford 1	Conn
Modern Lab. Equipment Co. Inc.	1811 1st Ave. New York 28	NY
Smith, Ltd., B. G.	Briton Rd. Coventry	Eng
Remington Air Conditioning Div. of Remington Corp.	Willey St. Auburn	NY
Trinity Equipment Corp.	Box 1172, Cortland	NY

DEIONIZATION APPARATUS
See DEMINERALIZERS
ION-EXCHANGE EQUIPMENT
WATER CONDITIONERS

DELAY LINES

A.E.I. Ltd.	30 Grosvenor Pl, London SW1, Eng	
Ad-Tu Electronics Lab. Inc.	140 Dickson Ave, Passaic	NJ
AMP Inc.	Eisenhower Blvd, Harrisburg	Pa
Andrew Labs. Inc.	501 New Path Ave. West Hartford 10	Conn
Aveley Electric, Ltd.	S. Ockendon, Essex, England	
Columbia Technical Corp.	34-30 Bklyn-Qns Exp. W, Woodside 77	NY
Computer Control Co. Inc.	983 Concord St. Framingham	Mass
Computer Systems Inc.	Culver Rd. Monmouth Junction	NJ
Cornell-Dubilier Electronics Div. Fed. Pac. Elec. Co.	50 Paris St. Newark 1	NJ
D.I.S.E. Nuclear Corp.	Via A. Bonfini 30, Milan	Ital
Delrina, Inc.	630 Fayette Ave. Mamaroneck	NY
Digital Equipment Corp.	Maynard	Mass
ESC Electronics Corp.	534 Bergen Blvd, Palisades Park	NJ
Fairchild Electric, Inc	Industrial Pk. 01, Plainview	NY
General Radio Co.	West Concord	Mass
Helipot Div. of Beckman Instruments, Inc.	2500 Harbor Blvd, Fullerton	Cal
Hermetic Seal Transformer Co. Div. Dresser Ind. Inc.	1011 N 6th St, Garland	Tex
Lenthurst Aircraft Corp.	Box 333 Burbank	Cal
Lumatron Electronics, Inc.	116 County Courthouse Rd, New Hyde Park	NY
Marconi's Wireless Telegraph Co., Ltd.	Chelmsford, Essex, England	
Milton Mfg. Co., James	180 Exchange St, Malden	Mass
PCA Electronics Inc.	16799 Schoenborn St, Sepulveda	Cal
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 187	Eindhoven	Neth
Polyphase Instrument Co.	E 4th St, Bridgeport	Pa
Raytheon Co. Industrial Components Div.	55 Chapel St. Newton	Mass
Sangamo Electric Co.	11 & Converse Sts, Springfield	Ill
Stellarium Mfg. Co.	Selma	NC
Technical Div. Gen. Instrument Corp.	108 Pearl St, Chicopee	Mass
Sperry Gyroscope Co. Div. Sperry Rand Corp.	Great Neck	NY
Standard Winding Co. Div. Orkimo Corp.	46-02 Bronx St, Hornbrook	NY
Telecomputing Corp.	8355 Aero Dr, San Diego 11	Cal
Valor Instruments, Inc.	12854 Crenshaw Blvd, Gardena	Cal
Wheeler Electronic Corp.	150 E Aurora St, Waterbury 20	Conn

DEMINERALIZERS
See Also ION-EXCHANGE EQUIPMENT
WATER CONDITIONERS

Alco Products, Inc.	Box 1005, Schenectady 5	NY
ALLISCHALMERS MFG. CO. Adv. Pgs. 109-111	935 S 70th St. Milwaukee	Wis
Aqua-Chem, Inc.	2556 N Grand Ave, Waukesha	Wis
AVERY & SONS, CO., Adv Pg 79	115 Hudson Ave. Cambridge	Mass
BARNSTEAD STILL & STERILIZER CO. Adv Pg 210	64 Lanesville Ter. Boston 31	Mass
Belco Ind Equip Div Bogue Elec Mfg Corp.	100 Pennsylvania Ave. Paramus	NJ
CENTRAL SCIENTIFIC CO. Adv Pg 112	1700 Irving Park Rd. Chicago 13	Ill
Chem-Pure Service Co.	708 Industrial Rd. San Carlos	Cal
Cochrane Corp.	3654 17th St. Philadelphia 32	Pa
Crystal Research Labs. Inc.	20 Alva St. Hartford	Conn
Dem-Chem Inc.	77 Havemeyer Ln, Stamford	Conn
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 600, Groton	Conn
ELGIN SOFTENER CORP. Adv Pg 116	179 N Grove Ave. Elgin	Ill
General Water Conditioning Co.	216 W 14 St, New York 11	NY
Jeffers, Inc.	Box 5055, Tucson	Ariz
Kelley & Co., G. G.	30 Taylor St, Boston 20	Mass
Knapp Mills Inc.	22-18 Borden Ave. LIC	NY
NATIONAL ANNEALING BOX CO. Adv Pg 104	Box 520, Washington	Pa
Nestlecq Thermometer Co. Inc.	236 Livingston St, Brooklyn 1	NY
Penfield Mfg. Co. Inc.	46 Britannia St, Meriden	Conn
Permutit Co. Div. Pfaudler Permutit Inc.	50 W 44th St, New York 36	NY
Pittsburgh Piping & Equipment Co.	158 40th St, Pittsburgh	Pa
Pumps & Softners Ltd.	690 Waterloo St, London	Ont
Scientific-Boston Inc.	Box 2225, Pittsburgh 30	Pa
Tosi, S.p.a., Franco	Legnano, Milan	Ital
Vennes pour le Traitement des Eaux, S A	1 Quai des Ventes, Liege	Belg

DENSITOMETERS

Applied Research Labs. Inc.	Box 1710, Glendale 5	Cal
Automation Products, Inc.	3030 Max Roy St, Houston 26	Tex
Baldwin Industrial Controls	Dartford, Kent, England	
Bausch Kodak Co.	360 Santa St, Rochester 4	NY
Electro-Optics Co.	107-1 Broadway, New York 7	NY
Falk & Co. Ltd., M.	Bradley House, Nuggets, Surrey, Eng	
FRANKLIN SYSTEMS, INC. Adv Pg 226	3734 Hillsboro Rd. W Palm Beach	Fla
Hartman Scientific Corp.	2327 Wrightwood Ave, Chicago	Ill
KELMAN INSTRUMENT CO. Adv Pg 233	Box 1184-H, Chelsea	Mich
Jarrell-Ash Co.	26 Farwell St, Newtonville 60	Mass
KAMAN NUCLEAR, Adv. Pgs. 190, 191	Garden of the Gods Rd. Colo Springs	Colo
Lewin & Northrop Ltd.	Broad St, Birmingham 19	Eng
Micro Industries	356 N Foothill Rd, Beverly Hills	Cal
MILLION, INC., GEORGE T. Adv Pg 182	132 Hudson St. New York 36	NY
Porter Aeronautical Corp.	Route 622, Union	NJ
Powerton Ultrasonics Corp.	Expwy, Ind. Pk. Plainview	NY
S. A. L. P.	38 Rue Gabriel Crie, Malakoff, Seine	Fr
Simmonds Precision Products, Inc.	105 White Plains Rd, Tarrytown	NY
Wallin Optical Systems Inc.	10833 Venice Blvd. Tarzana	Cal
WELCH SCIENTIFIC CO. Adv Pg 192	1515 Sedgwick St. Chicago 10	Ill

DENSITY GAGES
See GAGES--THICKNESS OR DENSITY

DESICCATORS
See Also CABINETS--DRYING

Air Control, Inc.	460 Nutberth Ave, Nutberth	Pa
Atlantic Research Corp.	Alexandria	Va
Barlum & Chemicals, Inc.	4945 Erie St. Willoughby	Ohio
CENTRAL SCIENTIFIC CO. Adv Pg 112	1700 Irving Park Rd. Chicago 13	Ill
Gallenkamp & Co. Ltd., A.	Sun St. London, E. C. 2, England	
General Eng. Co. (Radcliffe) Ltd.	Bury Rd. Radcliffe, Lancs.	Eng
General Scientific Equipment Co.	Lincoln & Williams, Philadelphia 30	Pa
Kahn & Co. Inc.	Box 516, Hartford 1	Conn
Scientific Glass Apparatus Co. Inc.	100 Lakewood Ter. Bloomfield	NJ
Tosi, S.p.a., Franco	Legnano, Milan	Ital
Will Corp.	Box 1060, Rochester 3	NY

DESIGN, ENGINEERING & CONSTRUCTION
See SERV. & CONS'LT: ENGINEER-CONSTRUCTOR

DETECTORS--BURST-SLUG

Electronic Mon Sto d'	11 rue Petit, Clichy Seine	Fr
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Electric Co. Ltd. of England	Brth, Kent, England	
General Nuclear Corp	2200 S Cypress Ave, Fullerton	Cal
Hitachi, Ltd.	5-1 Marunouchi, Chiyoda-ku, Tokyo	Jap
INTERTECHNIQUE S A, Adv Pg 113-B	81 rue Escudier, Boulogne/Billancourt, Seine	Fr
L'Electronique Appliquee	35 rue de Docteur Finlay, Paris 15, Fr	
Linf Instruments, Inc.	2294 Mars Dr, Mountain View	Cal
Lorraine-Escaut	7 Boul-Point Bugeaud, Paris 16b	Fr
Miles Hivolt Ltd	106 Horsham Rd, Shoreham-by-Sea, Sussex	Eng
Monsch Inc. Sch. Model Eng. & Mfg. Co.	4870 S State St, Salt Lake City	Utah
Nuclear Enterprises (GB) Ltd.	Sighthill, Edinburgh 11	Scot
NUCLEAR ENTERPRISES LTD. Adv Pg 194	550 Berry St. Winnipeg 23	Man
Nimmy Electronics Ltd.	Moulton Rd. Northampton, England	

DETECTORS--GAS
See Also ANALYZERS--GAS

Acton Labs.	1180 Raymond Rd. Newark 2	NJ
American Instrument Co. Inc.	8030 Georgia Ave. Silver Spring	Md
Atlas Werke AG	Wolmerdinger Str. 44b/44d, Bremen	Ger
Automation Products, Inc.	3030 Max Roy St, Houston 26	Tex
CARAD CORP. Adv Pg 224	2301 Junipero Serra Blvd. Palo Alto	Cal
Consolidated Electrodynamics Corp.	200 Sierra Madre Villa, Pasadena	Cal
Device Engineering Inc. General Systems Div.	Pine Lane W, Caldwell	NJ
EDGERTON, GERMESHAUSEN & GRIER, INC. Adv Pg 180	160 Brookline Ave. Boston 15	Mass
Edwards High Vacuum, Inc.	3279 Grand Island Blvd, Grand Island	NY
Electricite Mon Sto d'	11 rue Petit, Clichy Seine	Fr
Engelhard Industries, Inc.	113 Astor St. Newark 3	NJ
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
GENERAL MEASUREMENTS, Adv Pg 28	55 Redwood Ave. Somerville	NY
General Nuclear Corp	2200 S Cypress Ave, Fullerton	Cal
General Scientific Equipment Co.	Lincoln & Williams, Philadelphia 30	Pa
Honeywell Controls, Ltd.	Vanderhoof Ave, Toronto, Ont Canada	
International Gas Detectors Ltd.	84 Gr. Wilson St, Leeds, 11 Yorks, Eng	
Kahlmann, Th.	25 bd de l'Amiral-Bruix, Paris 16e	Fr
LAND-AIR INC. SUB. BYWALECTRON INC. Adv Pg 204	7404 W Wilson Ave, Chicago 31	Ill
Leeds & Northrup Co.	4901 Stenton Ave, Phila 44	Pa
NUCLEAR ENTERPRISES LTD. Adv Pg 194	550 Berry St. Winnipeg 23	Man
Nuclear Products Co.	16435 Saranac Rd. Cleveland 16	Ohio
TRACERLAB, INC. Adv. Pgs. 134, 135-6	1601 Trapelo Rd. Waltham 54	Mass
Union Industrial Equipment Corp	Port Chester	NY
Victory Engineering Corp.	Springfield Ave. Springfield	NJ
Wallace & Tiernan, Inc.	25 Main St. Belleville 9	NJ

DETECTORS--LEAK

Atlas Werke AG	Wolmerdinger Str. 44b/44d, Bremen	Ger
Consolidated Electrodynamics Corp.	200 Sierra Madre Villa, Pasadena	Cal
Crosby-Telectronics Corp.	56 Kimbel St. Westbury	NY
Device Engineering Inc. General Systems Div.	Pine Lane W, Caldwell	NJ
EDGERTON, GERMESHAUSEN & GRIER, INC. Adv Pg 180	160 Brookline Ave. Boston 15	Mass
Edwards High Vacuum, Inc.	3279 Grand Island Blvd, Grand Island	NY
Gann & Co. Inc., George W.	Hampstead Tpk. Dept. HEG, Franklin Square	NY
KELMAN INSTRUMENT CO. Adv Pg 233	Box 1184-H, Chelsea	Mich
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
Highside Chemicals, Inc.	6-10 Colfax Ave. Clifton	NJ
Hilger & Watts, Ltd.	98 St. Pancras Way, London NW 1, Eng	
Hitachi, Ltd	1-6-chome Marunouchi, Chiyoda-ku, Tokyo	Jap
International Gas Detectors Ltd.	84 Gr. Wilson St, Leeds, 11 Yorks, Eng	
L'Electronique Appliquee	35 rue de Docteur Finlay, Paris 15	Fr
LINDE CO. DIV. UCC, Adv Pg 125	270 Park Ave. New York 17	NY
Magnaflux Corp.	7300 W Lawrence, Chicago 31	Ill
Menlo Research Laboratory	1025 Bay Rd. East Palo Alto	Cal
MSC EQUIPMENT CORP. NATIONAL RESEARCH CORP. Adv Pg 220	60 Charlemont St. Newton Highlands 61	Mass
NUCLEAR ENTERPRISES LTD. Adv Pg 194	550 Berry St. Winnipeg 23	Man
Nuclear Products Co.	16435 Saranac Rd. Cleveland 16	Ohio
Ontario Research Foundation	43 Queen's Pk. Toronto 5, Ontario	Can
Perkin-Elmer Corp.	Norwalk	Conn
Photobell Co. Inc.	15 E 22 St. New York 10	NY
Powerton Ultrasonics Corp.	Expwy, Ind. Pk. Plainview	NY
STOKES CORP. F. J. Adv Pg 241	5500 Tabor Rd. Philadelphia 20	Pa
TH'MSON-HOUSTON (CIE. FRANCAISE) Adv Pg 112-D	173 Blvd. Haussman, Paris 8	Fr
Tracerlab Reactor Monitoring Center	1650 Wright Ave. Richmond	Cal
20th Century Electronics Ltd.	King Henry's Dr. New Addington Croydon, Surrey	Eng
Ultron Co., H. W.	2941 San Luis Rey Rd. Oceanside	Cal
Union Industrial Equipment Corp	Port Chester	NY
Vacuum Apparatus Co	Box 1001, Palo Alto	Cal
Vacuum-Electronic Corp.	Terminal Dr, Plainview	NY
Vacuum Ind. Applications, Ltd.	Nellerton Rd. Wishaw, Lanarkshire	Scot
Water Associates	46 Franklin St, Framingham	Mass

DETECTORS--METAL

Beatty Scientific Co.	2011 7th St. Berkeley 10	Cal
Dion Co., J. W.	Englewood 42	NJ
Electro-Mechanical Research, Inc.	Box 3042, Sarasota	Fla
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
Perkins & Co. Ltd., Brian, Electronic Div.	2 Pilton, Edinburgh 5	Scot
Radio Corp. of America Industrial Electronic Prod.	Front & Cooper Sts, Camden 2	NJ
TERMINAL RADIO INTERNATIONAL LTD. Adv Pg 113-C	100 W 17th St. New York 11	NY

DETECTORS--RADIATION
See COUNTERS--RADIATION
DOSIMETERS--RADIATION
MONITORS--RADIATION

DETECTORS--VACUUM
See CONTROLS--VACUUM

DETERGENTS
See DECONTAMINANTS

DEUTERIUM GAS

Bio-Rad Laboratories	1237 S 32nd St, Richmond	Cal
ISOMET CORP., Adv Pg 84	433 Commercial Ave. Palisades Park	NJ
Merck Sharp & Dohme of Canada Ltd.	680 DeCarreville St, Montreal 3	P. Q.
SHOWA DENKO K. K., Adv Pg 113-A	34 Shiba Hyemoto-cho, Minato-ku, Tokyo	Jap
U. S. NUCLEAR CORP., Adv Pg 127	801 N Lake St. Box 2022, Burbank	Cal
Volk Radiochemical Co.	8260 Elmwood Ave, Skokie	Ill

DIELECTRIC--CONSTANT MEASURING INSTRUMENTS

Berkley & Dexter Labs. Inc.	50 Frankfort St. Fitchburg	Mass
Canadian Marconi Co.	2442 Trenton Ave. Montreal 16	Can
Custom Scientific Instruments Inc.	341 Devon St. Kearny	NJ
Dynisco Div. Hewlett-Packard Co.	395 Page Mill Rd. Palo Alto	Cal
Epic, Inc.	150 Nassau St, New York 38	NY
FOXBORO CO. Adv Pg 189	38 Neponset Ave. Foxboro	Mass
General Radio Co.	West Concord	Mass
Kahl Scientific Instrument Corp.	Box 1165, El Cajon	Cal
KAMAN NUCLEAR, Adv. Pgs. 190, 191	Garden of the Gods Rd. Colo Springs	Colo
Photobell Co. Inc.	15 E 22 St. New York 10	NY

Simmonds Precision Products Inc.	108 White Plains Rd. Tarrytown	NY
Wayne Kerr Corp.	1463 Race St. Philadelphia 3	Pa

DIESEL MOTOR-GENERATOR SETS
See MOTOR-GENERATOR SETS

DIGITAL COMPUTERS
See COMPUTERS—DIGITAL

DIGITAL INDICATING DEVICES
See Also SCALING TUBES—DECADE
COUNTERS—ELECTROMECHANICAL

AEG, Adv Pg 113-A	Nackenau, Frankfurt/Main, Germany	
Ad-Tu Electronics Lab. Inc.	140 Trefoine Ave, Passaic	NJ
Aerosol Scientific Inc. Control Equip. Div.	Comly Ave. Greenwich	Conn
AMPEREX ELECTRONIC CORP., Adv Pg 63	230 Duffy Ave. Hicksville	NY
Atlas Werke AG	Wilhelmshaven 99, 4417/440, Bremen	Ger
Barnes Development Co	213 W Baltimore Pike, Lansdowne	Pa
Beckis Telecom U.K. Ltd.	High Church St. New Bedford, Beds.	Eng
Berkeley Div. Beckman Instruments Inc.	2200 Wright Ave. Richmond	Cal
Berman Instrument Corp.	8000 Kinsman Rd. Fort Wayne	Ind
Bivins Accompliment Ltd.	Willow Ln. Mitcham, Surrey, England	
Burroughs Corp. Electronic Components Div.	Box 1226, Plainfield	NJ
Canadian Marconi Co.	2442 Trenton Ave. Montreal 16	Can
COMPONENTS CORP. NUCLEAR INSTRUMENT DIV Adv Pg 108	104 Main St. Denville	NJ
Consolidated Controls Corp.	5022 San Mateo, NE, Albuquerque	NM
Dagnetics Inc. Control Systems Div.	4655 Mildmar Rd. La Jolla	Cal
Dymec Div. Hewlett-Packard Co.	395 Page Mill Rd. Palo Alto	Cal
Electric Indicator Co. Inc.	Camp Ave. Stamford	Conn
Electric Tachometer Corp.	49th & Upland St. Philadelphia 43	Pa
Electronic Associates, Inc.	Long Branch	NJ
Engineered Electronics Co.	1441 E Chestnut Ave. Santa Ana	Cal
Esin Pacific Div. Esin Instrument	13502 S Weber Way, Hawthorne	Cal
Fennell Instruments, Ltd.	Light Industrial Estate, York Rd. Wetherby	Eng
Fertanti-Packard Electric Ltd.	Industry Rd. Toronto 16	Ont
Fischer & Porter Co.	80 Warminster Rd. Warminster	Pa
General Applied Science Labs. Inc.	Merrick & Stewart Ave. Westbury	NY
General Dynamics/Astronautics	Box 1128, San Diego 12	Cal
General Dynamics/Electronics	108 Carlton St. Rochester 3	NY
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Radio Co.	West Concord	Mass
Hayden Co., A. W.	500 N Elm St. Waterbury	Conn
Hilger & Watts, Ltd.	98 St. Pancras Way, London NW 1	Eng
Hycon Mfg. Co.	700 Royal Oaks Dr. Monrovia	Cal
Information Systems, Inc.	10131 National Blvd. LA 34	Cal
Kin Tel. Div Cohu Electronics Inc.	5725 Kearny Villa Rd. San Diego 12	Cal
Leeds & Northrup Co.	4936 Stenton Ave. Phila 44	Pa
Leeds & Northrup Ltd.	Broad St. Birmingham 15	Eng
Litton Industries	336 N Foothill Rd. Beverly Hills	Cal
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
Marion Instrument Co.	10800 Madison Ave. Cleveland 2	Ohio
National Spectrographic Lab. Inc	6300 Euclid Ave. Cleve 3	Ohio
New Linear Systems, Inc.	Del Mar Airport, Del Mar	Cal
Philco Corp. Govt. & Ind. Gr.	4700 Wissahickon Ave. Phila 44	Pa
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 107	Eindhoven	Neth
PHYSICAL SCIENCES CORP. Adv Pg 26	369 N Fair Oaks, Pasadena	Cal
Pneumatic & Co. GMBH	Box 5708, Frankfurt/Main 1, Germany	
Potter Aeronautical Corp.	Route #22, Union	NJ
Pye, Ltd	St. Andrews Rd, Cambridge	Eng
Racal Instruments Ltd.	Western Rd. Bracknell, Berks, England	
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	865 Merrick Rd. Lynbrook	NY
Rahotronics Enterprises, Inc.	9422 E Indian School Rd. Phoenix 18	Ariz
Servomechanisms, Inc.	820 N Aviation Blvd. El Segundo	Cal
Siemens & Halske AG	Rheinbrechtstr. 50, Karlsruhe, Germany	
Solartron Electronic Group Ltd.	Victoria Rd. Farnborough, Hants, Eng	
Southern Instruments, Ltd.	Frimley Rd. Camberley, Surrey	Eng
Special Instrument Laboratory, Inc	312 W Vine Ave, Knoxville 10	Tenn
Sperry Gyroscope Co. Div. Sperry Rand Corp.	Great Neck	NY
Standard Tel. & Cables Ltd.	29 Glasshouse Yd. London EC 1	Eng
Stevens-Arnot Co.	Grayslake	Ill
SYSTEMS ENGINEERING LAB. INC. Adv Pg 198	Box 9140, Fort Lauderdale	Fla
TRC, Inc	2 Aerial Way, Syosset	NY
TECHNICAL MEASUREMENT CORP. Adv Pg 63	441 Washington Ave. North Haven	Conn
Telechrome Mfg. Corp.	186 Direx Ave. Amityville	NY
Telecomputing Corp.	8120 Aero Dr. San Diego 11	Cal
Tesla Electronics Co. Inc.	Wilton	Conn
VARO, Adv Pg 128	2201 E Colorado, Pasadena	Cal
Veeder-Root, Inc.	70 Sargeant St. Hartford 2	Conn
Victor Adding Machine Co.	3900 N Rockwell St. Chicago 18	Ill
Walker Co.	10021 S La Cienega Blvd. LA 45	Cal
Wang Laboratories	12 Huron Dr. Natick	Mass

DIODES—SEMICONDUCTOR
See Also TRANSISTORS
COUNTERS—RADIATION
SEMICONDUCTOR DETECTORS

A.E.I. Ltd.	30 Grosvenor Pl. London SW1, Eng	
Alsthom, Nucleon Div.	38, Ave. Kléber, Paris 16, France	
AMPEREX ELECTRONIC CORP., Adv Pg 63	230 Duffy Ave. Hicksville	NY
Bell Telephone Mfg. Co.	50 Berkenrode, Hoboken/Antwerp	Belg
Bradley Semiconductor Corp.	275 Nelson St. New Haven	Conn
Clevite Transistor	200 Smith St. Waltham 54	Mass
Consil-Dubilier Electronics Div. Fed. Pac. Elec. Co.	60 Paris St. Newark 1	NJ
D.I.S.I. Nuclear Corp.	Via A. Bonfoni 30, Milan	Ital
Eitel Bodmer Corp.	644 W 12th St. Erie	Pa
Fairchild Semiconductor Corp.	545 Whisman Rd. Mountain View	Cal
Fansteel Metallurgical Corp.	North Chicago	Ill
Fermont Electric, Inc	Industrial Pk. 81, Plainview	NY
Hughes Semiconductor Div.	500 Superior Ave. Newport Beach	Cal
International Rectifier Corp.	233 Kansas St. El Segundo	Cal
KEARFOTT DIV. GEN. PRECISION, INC. Adv Pg 221	1150 McBride Ave. Little Falls	NJ
Microwave Associates, Inc.	South Ave. Burlington	Mass
Motorola Semiconductor Products Inc.	5005 E McDowell Rd. Phoenix	Ariz
NERATOOM, N. V., Adv Pg 113-F	Noordelaan 28, The Hague	Neth
Nucleonic Products Co.	1801 Grande Vista Ave. Los Angeles 23	Cal
OAK RIDGE TECHNICAL ENTERPRISES CORP. Adv Pg 229	Box 234, ORNOCI, Oak Ridge	Tenn
Clevite Mfg. Co.	3801 Howard St. Skokie	Ill
Pacific Semiconductor, Inc.	12955 Chadron Ave. Hawthorne	Cal
PHILCO CORP. LANSDALE TUBE DIV. Adv Pg 199	Church Rd. Lansdale	Pa
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 107	Eindhoven	Neth
RCA Victor Co Ltd	1001 Lenoir St. Montreal 30	PQ
Radio Corp. of America Semiconductor & Materials Div.	Box 591, Somerville	NJ
Raytheon Co. Semiconductor Div.	150 California St. Newton 58	Mass
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
Shockley Transistor Unit, Clevite Transistor	1901 Page Mill Rd. Palo Alto	Cal
SOLID STATE RADIATIONS, INC. Adv Pg 211	2261 S Carmelina Ave. LA 64	Cal
SPERRY SEMICONDUCTOR DIV. SPERRY RAND CORP. Adv Pg 232	380 Main St. Norwalk	Conn
Standard Tel. & Cables Ltd.	29 Glasshouse Yd. London EC 1	Eng
Sylvania Elec Prods Inc. Semiconductor Div.	100 Sylvan Rd. Woburn	Mass
Syncon Co.	305 Lexington Ave. Homer City 29	Pa
TERMINAL RADIO INTERNATIONAL LTD. Adv Pg 113-C	240 W 17th St. New York 11	NY
Texas Instruments Incorporated, Transistor Div.	Box 5012, Dallas 22	Tex
THOMSON-HOUSTON (CIE. FRANCAISE), Adv Pg 112-D	173 Blvd. Haussman, Paris 8	Fr
Transitron Electronic Corp.	168 Albion St. Wakefield	Mass

DIRECT CONVERSION OF RADIOACTIVITY
See SERV. & CONS'LT: DIRECT CONVERSION OF RADIOACTIVITY

DISSOLVERS

Alden Engineering Co.	450 Lexington Ave. New York 17	NY
Chiyoda Chemical Eng. & Const. Co Ltd	1-30, Shiba-Hamadaki, Minato-Ku, Tokyo, Japan	
Fraser & Co. Ltd., W. J.	Harold Hill, Romford, Essex, England	
Paterson Foundry & Machine Co.	East Liverpool	Ohio
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	33 Bd G. Clemenceau, Courbevoie, Seine	Fr

DISTILLATION EQUIPMENT
See Also STILLS—LABORATORY

Aqua-Chem, Inc.	205 N Grand Ave. Waukesha	Wis
Bethlehem Steel Corp.	701 E 3rd St. Bethlehem	Pa
Chiyoda Chemical Eng. & Const. Co Ltd	1-30, Shiba-Hamadaki, Minato-Ku, Tokyo, Japan	
Condenser Service & Engrg. Co. Inc.	180 Observer Hwy. Hoboken	NJ
Consolidated Vacuum Corp.	1775 Mt. Read Blvd. Rochester	NY
Eastwood Plastics, Ltd. Priory Wks.	Arnold Rd. Leigh-on-Sea, Essex	Eng
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 600, Groton	Conn
FISH-SCHURMAN CORP. Adv Pg 234	70 Fortune Rd. New Rochelle	NY
FOSTER WHEELER CORP. Adv Pg 130	666 5th Ave. New York 19	NY
Fraser & Co. Ltd., W. J.	Harold Hill, Romford, Essex, England	
Gallenkamp & Co. Ltd., A.	Sun St, London, E. C. 2, England	
Griscom-Russell Co.	Massillon	Ohio
Horton Steel Works, Ltd.	55 Adelaide St. W, Toronto	Ont
NATIONAL ANNEALING BOX CO. Adv Pg 194	Box 530, Washington	Pa
NATIONAL LEAD CO. Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
New York Air Brake Co.	230 Park Ave. New York 17	NY
Olsen Filtration Engineers Div. Atomic Ldry. Mach'y. Co.	3484 Section Ave. Cinc 12	Ohio
Pall Corp.	Glen Cove	NY
Paterson Foundry & Machine Co.	East Liverpool	Ohio
Pfaudler Co. Div. Pfaudler Permutit Inc.	1000 West Ave. Rochester 3	NY
Refinery Scientific Div. Schneider & Co.	76 Cliff St. New York 38	NY
Scientific Glass Apparatus Co. Inc.	199 Lakewood Tpk. Bloomfield	NJ
Smith Corp., A. O., Atomic & Process Equip. Div.	2525 S 27 St. Milwaukee 1	Wis
STOKES CORP., F. J. Adv Pg 241	5500 Tabor Rd. Philadelphia 20	Pa
Sulzer Bros. Ltd.	Winterthur	Switz
Vennes pour le Traitement des Eaux, S A	1 Quai des Vennes, Liege	Belg

DOORS—AIRTIGHT ACCESS

ALLIED ENGINEERING & PRODUCTION CORP., Adv Pg 242	3421 Blanding Ave. Alameda	Cal
Babcock & Wilcox Ltd.	209 Euston Rd. London NW 1, England	
Chicago Bridge & Iron Co.	332 S Michigan Ave. Chicago 4	Ill
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 600, Groton	Conn
Hermes S.A. Aachen, J.	Monnoyer-sur-Sambre	Belg
Horty Co., Inc., R. V.	1433 Herman Ave. Detroit 11	Mich
Horton Steel Works, Ltd.	55 Adelaide St. W, Toronto	Ont
Pavlis Co.	67 Stewart Ave. Brooklyn 37	NY
Pittsburgh-Des Moines Steel Co.	Neville Island, Pittsburgh 25	Pa
Radiation Products, Inc.	Pt. 40 Rd, Plainfield 22	NY
Vacuum Research (Cambridge) Ltd.	Quayside, Bridge St, Cambridge, Eng	
Vickers-Armstrongs (S. Marston) Ltd.	Swindon, Wiltshire, England	

DOORS—SHIELDED
See SHIELDING—RADIATION

DOSIMETER CHARGERS

B & K Labs. Ltd.	4 Tilney St, Park Ln, London W1	Eng
Beckman Corp. Cincinnati Div.	3130 Wasson Rd. Cincinnati 8	Ohio
D.I.S.I. Nuclear Corp.	Via A. Bonfoni 30, Milan	Ital
Dr. Vieno KG	50 Bonnbungweg, Bonn	Ger
JOHNSON & ASSOCIATES, INC., WILLIAM B., Adv Pg 208	Box 478, Montclair Lakes	NJ
LANDVERK ELECTROMETER CO. Adv Pg 210	640 Sonora Ave. Glendale 1	Cal
LIGHTS ELECTRONIC LABS. Adv Pg 210	1226 Flushing Ave. Brooklyn 37	NY
M.B.L.E.	80 Rue des Deux Gares, Brussels 7	Belg
NERATOOM, N. V., Adv Pg 113-F	Noordelaan 28, The Hague	Neth
NUCLEAR-CHICAGO CORP., Adv. Pgs. 34-37	333 E Howard Ave. Des Plaines	Ill
NUCLEAR ENTERPRISES LTD., Adv Pg 194	330 Bury St. Winnipeg 21	Man
NUCLEAR MEASUREMENTS CORP., Adv Pg 237	2460 N Arlington Ave. Indianp. 18	Ind
Nuclear Research Applications Ltd.	Bell St, Reigate, Surrey, England	
Picker X-Ray Corp.	25 S Broadway, White Plains	NY
Pneumatic & Co. GMBH	Box 5708, Frankfurt/Main 1, Germany	
RADIATION COUNTER LABS. INC. Adv. Pgs. 82, 83	5722 W Grand St. Skokie	Ill
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	865 Merrick Rd. Lynbrook	NY
SELO	Via Teodosio 57, Milan	Ital
Stephen & Co., Ltd., R. A.	139-141 Lavender Ave. Mitcham, Surrey	Eng
TERMINAL RADIO INTERNATIONAL LTD. Adv Pg 113-C	240 W 17th St. New York 11	NY
TRACERLAB, INC. Adv. Pgs. 136, 137-5	1601 Trapelo Rd. Waltham 54	Mass
U. S. NUCLEAR CORP., Adv Pg 127	801 N Lake St. Box 2022, Burbank	Cal
VICTOREEN INSTRUMENT CO., Adv. Pg. 4th Cover	2000-11 Hough Ave. Cleveland 3	Ohio

DOSIMETERS—RADIATION, <1,000 r
See Also CHAMBERS—IONIZATION
COUNTERS—RADIATION
MONITORS—RADIATION
PHANTOMS—RADIATION DOSIMETRY

1. CHEMICAL
2. CRYSTAL
3. FILM-BADGE
4. GLASS
5. ION-CHAMBER
6. NEUTRON
7. POCKET

AEG, 5-6, Adv Pg 113-A	Nackenau, Frankfurt/Main, Germany	
Allied Research Associates, Inc. 1	43 Leon St. Boston 15	Mass
AMERICAN NUCLEAR CORP. 1-7, Adv Pg 198	Box 428, Oak Ridge	Tenn
Atomaterm-Bussaine Corp. 4-6-8-7	111 W Jewel Ave, St. Louis 23	Mo
Automation, Inc. Div C W Saul Co Inc. 7	6800 S Hoover, Los Angeles 44	Cal
ATOMIC ACCESSORIES, INC. 5, Adv Pg 206	811 W Merrick Rd. Valley Stream	NY
Atomic Film Badge Co. 3	21-20 49th Rd. Long Island City	NY
B & K Labs. Ltd. 7	4 Tilney St, Park Ln, London W1	Eng
Baldwin Industrial Controls, 3-5-7	Dartford, Kent	Eng
Beach & Lomb, Inc. 4	16000 Beach St, Rochester 3	NY
Beckman Corp. Cincinnati Div. 5-6-7	3130 Wasson Rd. Cincinnati 8	Ohio
Berwick Associates, Inc. 3-5-7	130 E 63rd St, New York 22	NY
Cambridge Instrument Co. Inc. 7	450 Lexington Ave. New York 17	NY
CONTROLS FOR RADIATION, INC. 3 Adv Pg 189	130 Alewife Brook Pkwy. Cambridge 40	Mass
Corning Glass Works, Shielding Radiation, 4	Corning	NY
D.I.S.I. Nuclear Corp. 4-6-8-7	Via A. Bonfoni 30, Milan	Ital
Dr. Vieno KG	50 Bonnbungweg, Bonn	Ger
EGGERTON, GERMESHAUSEN & GRIER, INC. 7-8 Adv Pg 185	168 Brookline Ave. Boston 15	Mass
Eloxo, Inc. 6	2201 W Broad St, Falls Church	Va
General Dynamics/Fort Worth, 1-5	Box 748 Fort Worth 1	Tex
HARSHAW CHEMICAL CO. 3, Adv Pg 89	1945 E 97th St. Cleveland 6	Ohio
Health Physics Services, Inc. 3	1509-13 Low St. Baltimore 5	Md
INDUSTRIAL ELECTRONIC HARDWARE CORP. 4, Adv Pg 30	189 Fifth St. New York	NY
Isotopes Specialties Co. 5	Box 808, Burbank	Cal

JOHNSON & ASSOCIATES, INC. WILLIAM B., 5-6-7,
Adv Pg 226 ..... Box 415, Mountain Lakes ..... NJ
Kuhl Scientific Instrument Corp. 5 ..... Box 1188, El Cajon ..... Cal
Kohe Kogyo Corp. 5-6 ..... 1-3 Wakayama-Dori, Hyogo-ku, Kobe ..... Jap
LANDAUER, JR. & CO., R. S. 2,
Adv Pg 12 ..... 3930 Ninth St. Harrison Ill
LANDSVERK ELECTROMETER CO. 5,
Adv Pg 248 ..... 640 Sonora Ave. Glendale 1 ..... Cal
Lockheed Aircraft Corp. 5-6 ..... Box 551, Burbank ..... Cal
M.B.L.E. 7 ..... 80 Rue des Deux Gares, Brussels 7 ..... Belg
Marion Labs, Inc. 1 ..... Box 963, Kansas City ..... Mo
MELLON, INC., GEORGE T. 3-5-7,
Adv Pg 182 ..... 132 Nassau St. New York 38 ..... NY
Nuclear Research Applications Ltd. 7 ..... Bell St, Reigate, Surrey, England
Nuclear Science & Engineering Corp.,
3-6 ..... Box 10901, Pittsburgh 36 ..... Pa
NUCLEONIC CORP. OF AMERICA, 3-5-6-7,
Adv Pg 202 ..... 196 Degraw St. Brooklyn 31 ..... NY
Optics Technology Inc. 6-7 ..... 548 Harbor Blvd. Belmont ..... Cal
Pacific Transducer Corp. 7 ..... 11836 SW Pico Blvd. Los Angeles 64 ..... Cal
Paxmann Ltd. 5 ..... 6A Princes St, Hanover Sq, London W1 ..... Eng
Philips Electronic Instruments, 7 ..... 780 S Fulton Ave, Mt. Vernon ..... NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. 5-7,
Adv Pg 187 ..... Eindhoven ..... Neth
Picker X-Ray Corporation, 3-5-6-7 ..... 1275 Mamaroneck Ave. White Plains ..... NY
Pittsburgh Plate Glass Co. 6 ..... 632 Fort Duquesne Blvd. Pittsburgh 22 ..... Pa
Pontechke & Co. oHG, 5-7 ..... Box 2706, Frankfurt/Main 1 ..... Ger
RADIATION COUNTER LABS. INC. 7,
Adv. Pgs. 83, 83 ..... 5132 W Grove St. Skokie Ill
Radiation Detection Co. 8 ..... 4047-49 Transport St. Palo Alto ..... Cal
RADIATION EQUIP. & ACCESSORIES CORP. 2-3-6-7,
Adv. Pg. 3rd Cover ..... 665 Hertick Rd. Lynbrook ..... NY
RADIATION INSTRUMENT DEVELOPMENT LAB. 7,
Adv. Pgs. 254, 255-D ..... 61 E North Ave. Northlake Ill
RADIATION TECHNOLOGY, INC. 5-6-7,
Adv. Pg. 3rd Cover ..... 657 Antone St. NW, Atlanta 18 ..... Ga
REACTOR EXPERIMENTS, INC. 6,
Adv Pg 26 ..... 148 Harbor Blvd. Belmont ..... Cal
Reuter-Stokes Electronic Components,
Inc. 5-6 ..... 7140 Hamilton Ave. Cleveland 14 ..... Ohio
SAINT-GOBAIN NUCLEAIRE, 4,
Adv Pg 229 ..... 23 Bd G. Clemenceau, Courbevoie, Seine ..... Fr
St. John X-Ray Laboratory, 3 ..... Califon ..... NJ
Sampling Machine Co., A. M. 3 ..... 5000 Tazewell Pike, Knoxville 18 ..... Tenn
Servo Nuclear Corp. 7 ..... 20-21 Astoria Blvd. Long Island City ..... NY
Siemens & Halske AG, 6-7 ..... Rheinbrückenstr. 50, Karlsruhe ..... Ger
Siemens-Reiniger-Werke AG, 5-6-7 ..... Luitpoldstr. 48, Erlangen ..... Ger
SOLID STATE RADIATIONS, INC. 5-6-7
Adv Pg 251 ..... 2201 S Crenshaw Ave. LA 64 ..... Cal
Special Instruments Laboratory, Inc. 5-6 ..... 312 W Vine Ave, Knoxville 38 ..... Tenn
Specialty Electronics Devel. Corp. 4 ..... 131-01 20th Ave. Flushing ..... NY
Stephen & Co., Ltd., R. A. 7 ..... 130-138 Lavender Ave. Mitcham, Surrey ..... Eng
TRC, Inc. 1-6-3-6-7 ..... 3 Aerial Way, Syosset ..... NY
TERMINAL RADIO INTERNATIONAL LTD. 4-5-6-7,
Adv Pg 113-C ..... 240 W 17th St. New York 11 ..... NY
TRACERLAB, INC. 3-5-6-7,
Adv. Pgs. 126, 113-5 ..... 1601 Trapelo Rd. Waltham 54 ..... Mass
U. S. NUCLEAR CORP., 1-3-5-6-7,
Adv Pg 127 ..... 801 N Lake St. Box 2022, Burbank ..... Cal
VICTOREEN INSTRUMENT CO. 5-7,
Adv. Pg. 4th Cover ..... 5806-11 Hough Ave. Cleveland 3 ..... Ohio
X-Ray Monitoring Corp. 3 ..... 11-20 40th Rd. Long Island City ..... NY

DOSIMETERS—RADIATION, >1,000r
See Also CHAMBERS—IONIZATION
COUNTERS—RADIATION
MONITORS—RADIATION

1. CHEMICAL
2. CRYSTAL
3. FILM BADGE
4. GLASS
5. ION-CHAMBER
6. NEUTRON
7. POCKET

ABS, 5-6, Adv Pg 113-A ..... Nordstrasse, Frankfurt/Main, Germany
Allied Research Associates, Inc. 7 ..... 43 Leon St, Boston 15 ..... Mass
AMERICAN NUCLEAR CORP. 5-7,
Adv Pg 198 ..... Box 428, Oak Ridge ..... Tenn
Atomic Film Badge Corp. 3 ..... 11-20 40th Rd. Long Island City ..... NY
Bausch & Lomb, Inc. 4 ..... 80402 Bausch St. Rochester 2 ..... NY
Bendix Corp. Cincinnati Div. 5-7 ..... 3130 Vanoot Rd. Cincinnati 8 ..... Ohio
EDGERTON, GERMESHAUSEN & GRIER, INC. 1-6-5-7,
Adv Pg 105 ..... 160 Brookline Ave. Boston 15 ..... Mass
Eicon, Inc. 5 ..... 3205 W Broad St. Falls Church ..... Va
FRIESEKE & HOEPFNER GMBH, 5-6-7,
Adv Pg 112-H ..... Erlangen-Bruck ..... Ger
General Dynamics/Fort Worth, 5-6 ..... Box 748 Fort Worth 1 ..... Tex
MARSHAW CHEMICAL CO. 2, Adv Pg 89 ..... 1948 E 97th St. Cleveland 6 ..... Ohio
NAZELETON-NUCLEAR SCIENCE CORP. 6,
Adv Pg 58 ..... 4063 Fabian Way, Palo Alto ..... Cal
Kohe Kogyo Corp. 5 ..... 1-6 Wakayama-Dori, Hyogo-ku, Kobe ..... Jap
LANDAUER, JR. & Co., R. S. 2, Adv Pg 12 ..... 3930 Ninth St. Harrison Ill
LANDSVERK ELECTROMETER CO. 5-5,
Adv Pg 248 ..... 640 Sonora Ave. Glendale 1 ..... Cal
Lockheed Aircraft Corp., 5-6 ..... Box 551, Burbank ..... Cal
M.B.L.E. 7 ..... 80 Rue des Deux Gares, Brussels 7 ..... Belg
Marion Labs, Inc. 1 ..... Box 963, Kansas City ..... Mo
MELLON, INC., GEORGE T. 3-5-7,
Adv Pg 182 ..... 132 Nassau St. New York 38 ..... NY
Nuclear Research Applications Ltd. 7 ..... Bell St, Reigate, Surrey, England
Nuclear Science & Engineering Corp.,
3-6 ..... Box 10901, Pittsburgh 36 ..... Pa
NUCLEONIC CORP. OF AMERICA, 3-5-6-7,
Adv Pg 202 ..... 196 Degraw St. Brooklyn 31 ..... NY
Optics Technology Inc. 6-7 ..... 548 Harbor Blvd. Belmont ..... Cal
Pittsburgh Plate Glass Co. 6 ..... 632 Fort Duquesne Blvd. Pittsburgh 22 ..... Pa
Pontechke & Co. oHG, 5-7 ..... Box 2706, Frankfurt/Main 1 ..... Ger
Radiation Detection Co. 8 ..... 4047-49 Transport St. Palo Alto ..... Cal
RADIATION EQUIP. & ACCESSORIES CORP. 2-5-6-7,
Adv. Pg. 3rd Cover ..... 665 Hertick Rd. Lynbrook ..... NY
RADIATION TECHNOLOGY, INC. 5-6-7,
Adv. Pg. 3rd Cover ..... 657 Antone St. NW, Atlanta 18 ..... Ga
REACTOR EXPERIMENTS, INC. 6,
Adv Pg 26 ..... 148 Harbor Blvd. Belmont ..... Cal
Reuter-Stokes Electronic Components,
Inc. 5-6-7 ..... 2149 Hamilton Ave. Cleveland 14 ..... Ohio
SAINT-GOBAIN NUCLEAIRE, 4,
Adv Pg 229 ..... 23 Bd G. Clemenceau, Courbevoie, Seine ..... Fr
St. John X-Ray Laboratory, 3 ..... Califon ..... NJ
Sampling Machine Co., A. M. 3 ..... 5000 Tazewell Pike, Knoxville 18 ..... Tenn
Siemens-Reiniger-Werke AG, 5-7 ..... Luitpoldstr. 48, Erlangen ..... Ger
Special Instruments Laboratory, Inc. 5-6 ..... 312 W Vine Ave, Knoxville 38 ..... Tenn
Specialty Electronics Devel. Corp. 4 ..... 131-01 20th Ave. Flushing ..... NY
Stephen & Co., Ltd., R. A. 7 ..... 130-138 Lavender Ave. Mitcham, Surrey ..... Eng
TECHNICAL ASSOCIATES, 3, Adv Pg 235 ..... 149 W Providencia Ave. Burbank ..... Cal
U. S. NUCLEAR CORP. 1-3, Adv Pg 127 ..... 801 N Lake St. Box 2022, Burbank ..... Cal
X-Ray Dept. of General Electric Co. 3-5 ..... 4855 Electric Ave. Milwaukee ..... Wis
X-Ray Monitoring Corp. 3 ..... 11-20 40th Rd. Long Island City ..... NY

DRAIN BENCH
See Under FABRICATING EQUIPMENT

DRILLS—CONCRETE

Ingersoll-Rand Co. ..... 11 Broadway, New York 4 ..... NY
Super Tool Co. ..... 1st & Bridge Sts. Elk Rapids ..... Mich

DRY BOXES
See Also GLOVES—DRY BOX

Air Control, Inc. ..... 450 Narberth Ave. Narberth ..... Pa
ALLIED ENGINEERING & PRODUCTION CORP.,
Adv Pg 242 ..... 2421 Blending Ave. Alameda ..... Cal
AMERAY CORP., Adv Pg 173 ..... Route 46, Kenvil ..... NJ
American Sterilizer Co. ..... Box 6201, Erie ..... Pa
BLICKMAN, INC., S., Adv Pg 189 ..... 7900 Gregory Ave. Weehawken ..... NJ
Cosmico ..... Box 5864, Jacksonville 7 ..... Fla
Cayuga Machine & Fabricating Co. Inc. ..... 200 W Gould Ave. Depew ..... NY
CONTROLLED ATMOSPHERE ENCLOSURES MFG CO
Adv Pg 88 ..... Leonard Air Base, Hurlburt Field ..... Fla
DEFENSE APPAREL, Adv Pg 238 ..... 115 Alfye St. Hartford 5 ..... Conn
Edwards High Vacuum, Inc. ..... 3279 Grand Island Blvd. Grand Island ..... NY
General American Transportation Corp. ..... 135 S LaSalle St, Chicago 3 Ill
Hamilton Mfg. Co. ..... Two Rivers ..... Wis
JOHNSON & ASSOCIATES, INC., WILLIAM B.,
Adv Pg 226 ..... Box 415, Mountain Lakes ..... NJ
Kelley & Co, Q. G. ..... 88 Taylor St. Natick 25 ..... Mass
KEYAUNEE SCIENTIFIC EQUIPMENT,
Adv Pg 116 ..... 4042 Logan St. Adrian ..... Mich
KRUEGER FABRICATING CO. INC.,
Adv Pg 222 ..... Box 1284, Madison 1 ..... Wis
Liquid Metals, Inc. ..... Box 3605, Westford ..... Mass
Lydon Bros. Inc. ..... 65 Zabriskie St, Hackensack ..... NJ
Modern Lab. Equipment Co., Inc. ..... 1853 1st Ave. New York 28 ..... NY
Morris, Ltd., R. O. ..... Hilton Rd, Coventry ..... Eng
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),
Adv. Pgs. 217, 219, 221 ..... 1000 Warren St. Apollo ..... Pa
PHILCO CORP. LANSDALE TUBE DIV.
Adv Pg 197 ..... Church Rd. Lansdale ..... Pa
Plasmadyne Corp. ..... 2839 S Main St, Santa Ana ..... Cal
ROYAL RESEARCH CORP. Adv Pg 23 ..... 11824 Dublin Blvd. Hayward ..... Cal
Safety Bow, Inc. ..... 4916 W 67th St, Chicago 38 Ill
Snyder Mfg. Co. Inc. ..... Box 464, New Philadelphia ..... Ohio
Standard Safety Equipment Co. ..... 421 N Quentin Rd, Palatine Ill
STOKES CORP., F. J. Adv Pg 240 ..... 5500 Tabor Rd. Philadelphia 20 ..... Pa
Temperature Engineering Corp. ..... 1200 Tempcor Blvd. Riverton ..... NJ
Trinity Equipment Corp. ..... Box 1170, Cortland ..... NY
UNITED NUCLEAR CORP., Adv Pg 38 ..... 365 Winchester Ave. New Haven 4 ..... Conn
Vacuum Specialties Inc. ..... 34 Linden St. Somerville 2 ..... Mass
Vickers-Armstrongs (S. Marston) Ltd. ..... Swindon, Wiltshire, England
Warren Corp. ..... 2901 Brighton Rd. Pittsburgh 12 ..... Pa

DRYERS—GAS
See GAS DRYERS

DRYERS—VACUUM
See Also CABINETS—DRYING

Delta Design, Inc. ..... 3108 Adams Ave. San Diego 16 ..... Cal
Dynatech Corp. ..... 620 Massachusetts Ave. Cambridge 39 ..... Mass
Edwards High Vacuum, Inc. ..... 3279 Grand Island Blvd. Grand Island ..... NY
Gallenkamp & Co. Ltd., A. ..... Sun St, London, E. C. 2, England
General American Transportation Corp. ..... 135 S LaSalle St, Chicago 3 Ill
Kinney Vacuum Div. The M. T. Air Basic Co. ..... 3529 Washington St. Boston 30 ..... Mass
Modern Lab. Equipment Co., Inc. ..... 1853 1st Ave. New York 28 ..... NY
MSC EQUIPMENT CORP. NATIONAL RESEARCH CORP.
Adv Pg 220 ..... 80 Charlemont St. Newton Highlands 61 ..... Mass
NATIONAL ANNEALING BOX CO.
Adv Pg 104 ..... Box 520, Washington ..... Pa
National Research Corp ..... 70 Memorial Dr, Cambridge 42 ..... Mass
Paxmann Foundry & Machine Co. ..... East Liverpool ..... Ohio
PHILCO CORP. LANSDALE TUBE DIV.
Adv Pg 197 ..... Church Rd. Lansdale ..... Pa
STOKES CORP., F. J. Adv Pg 240 ..... 5500 Tabor Rd. Philadelphia 20 ..... Pa
Trinity Equipment Corp. ..... Box 1170, Cortland ..... NY
Vacuum Ind. Applications, Ltd. ..... Bothwell Rd, Wishaw, Lanarkshire ..... Scot
Vacuum Research (Cambridge) Ltd. ..... Quayside, Bridge St, Cambridge ..... Eng

EDDY-CURRENT EQUIPMENT

Assembly Products, Inc. ..... 30 Water Mill St. Cleveland ..... Ohio
Aveley Electric, Ltd. ..... S Ockendon, Essex ..... Eng
Beatty Scientific Co. ..... 2011 7th St. Berkeley 16 ..... Cal
Budd Co. Instrument Div. ..... Box 343, Phoenixville ..... Pa
Chiyoda Chemical Eng. & Const. Co Ltd ..... 1-30, Shiba-Shinbashi, Minato-Ku, Tokyo, Japan
Delapena & Son Ltd. ..... Tewkesbury Rd. Cheltenham, Glouc. Eng
Dice Co., J. W. ..... Englewood 41 ..... NJ
Electric Machinery Mfg. Co. ..... 800 Central Ave. Minneapolis 13 ..... Minn
Epic, Inc. ..... 180 Nassau St. New York 38 ..... NY
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 12 ..... 1 River Rd. Schenectady 5 ..... NY
Hitachi, Ltd. ..... 1-4 Marunouchi, Chiyoda-ku, Tokyo ..... Jap
Hydro Aire Co. Div. Crane Co. ..... 3000 Winona Ave. Burbank ..... Cal
Maritime Chemical & Repair Corp. ..... 423 Hamilton Ave. Brooklyn 32 ..... NY
Sofar-Schell, Ltd. ..... Honeypot La. Stanmore, Middx ..... Eng
TOKYO SHIBAURA ELECTRIC CO. LTD.
Adv Pg 223 ..... 12 Yanaka-cho 1-Chome, Chiyoda-ku, Tokyo ..... Jap
Unit Process Assemblies ..... 60-15 37th Ave. Woodside 77 ..... NY

ELECTROMETERS
See Also AMMETERS—MICRO-MICRO

American Trading Corp. Sub. EKCO Electronics, Ltd. ..... 30-01 20th St. Long Island City 6 ..... NY
Applied Physics Corp. ..... 2704 S Peck Rd. Monrovia ..... Cal
Automatic-Burmine Corp ..... 111 W Jewel Ave, St. Louis 22 ..... Mo
Baldwin Industrial Controls ..... Dartford, Kent, England
Cambridge Instrument Co., Ltd. ..... 10 Grosvenor Pl, London SW1, Eng
Cartar-Wright Corp. Princeton Div. ..... Box 110, Princeton ..... NJ
Dr. Vitro KG ..... 20 Sonnenbergweg, Bonn ..... Ger
E-H Research Labs, Inc. ..... 103 Adeline St. Oakland 08 ..... Cal
EMI ELECTRONICS LTD. AMERICAN TRADING CORP.
Adv Pg 209 ..... Southend-on-Sea, Essex ..... Eng
Epic, Inc. ..... 180 Nassau St. New York 38 ..... NY
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 12 ..... 1 River Rd. Schenectady 5 ..... NY
GENERAL MEASUREMENTS, Adv Pg 22 ..... 38 Railroad Ave. Gainesville ..... NY
General Radio Co. ..... West Concord ..... Mass
Gyn Electronics Corp. ..... Box 184 La Grange Ill
Hales Inc. ..... 3310 E Imperial Hwy. El Segundo ..... Cal
Honeywell Controls, Ltd. ..... Vandenhof Ave. Toronto, Ont Canada
INTERTECHNIQUE S A, Adv Pg 113-B ..... 81 rue Escudier, Boulogne/Billancourt, Seine ..... Fr.
FUTURE DEVELOPMENTS LTD.
Adv Pg 74 ..... Bath Rd. Beaconsfield, Reading, Berks ..... Eng
JOHNSTON LABS. INC., WILLIAM H.,
Adv Pg 188 ..... 3617 Woodland Ave. Baltimore 15 ..... Md
LANDSVERK ELECTROMETER CO.
Adv Pg 248 ..... 640 Sonora Ave. Glendale 1 ..... Cal
Meteorology Research, Inc. ..... 1499 W Lake Ave. Altadena ..... Cal
Mid-Eastern Electronics, Inc. ..... 30 Commerce St. Springfield ..... NJ
MINN-HONEYWELL REG CO. MOL PRODS GROUP,
Adv. Pgs. 126, 249 ..... Wayne & Windrim Aves. Phila. 44 ..... Pa
NUCLEAR-CHICAGO CORP.,
Adv. Pgs. 56-57 ..... 345 E Howard Ave. Des Plaines Ill
PHYSICAL SCIENCES CORP. Adv Pg 36 ..... 369 N Fair Oaks Ave. Pasadena ..... Cal
RADIATION TECHNOLOGY, INC.
Adv. Pg. 3rd Cover ..... 657 Antone St. NW, Atlanta 18 ..... Ga
Siemens & Halske AG ..... Rheinbrückenstr. 50, Karlsruhe ..... Ger
Smith-Florence, Inc. ..... Overlake Ind. Pk, Box 7317, Redmond ..... Wash
TERMINAL RADIO INTERNATIONAL LTD.
Adv Pg 113-C ..... 240 W 17th St. New York 11 ..... NY
TOKYO SHIBAURA ELECTRIC CO. LTD.
Adv Pg 223 ..... 12 Yanaka-cho 1-Chome, Chiyoda-ku, Tokyo ..... Jap
U. S. NUCLEAR CORP., Adv Pg 127 ..... 801 N Lake St. Box 2022, Burbank ..... Cal
Wayne Kerr Corp. ..... 1030 Race St. Philadelphia 5 ..... Pa

ELECTRON TUBES
See TUBES—ELECTRON

ELECTRONIC SYSTEM DESIGN
See SERV. & CONS'LT: ELECTRONIC SYSTEM DESIGN

EMERGENCY POWER GENERATORS
See MOTOR-GENERATOR SETS

ENCAPSULATED SOURCES
See SERV. & CONS'LT: RADIOACTIVE SOURCE ENCAPSULATION
RADIOGRAPHIC EQUIPMENT
SOURCES—RADIOACTIVE

ENCLOSURES—DUST FREE

Air Control Inc.	460 Hulbert Ave, Hulbert	Pa
Bud Radio, Inc.	2118 E 55th St, Cleveland 3	Ohio
Cutler-Hammer Inc.	432 N 12th St, Milwaukee 1	Wis
Kaflex Inc.	101 Park Ave, New York 17	NY
Kewanee Mfg. Co.	5083 S Center St, Adrian	Mich

ENGINEER-CONSTRUCTOR SERVICE
See SERV. & CONS'LT: ENGINEER-CONSTRUCTOR

ENGINEERING-DRAWINGS
See SERV. & CONS'LT: ENGINEERING DRAWINGS

ENVIRONMENTAL SURVEYS
See SERV. & CONS'LT: ENVIRONMETAL SURVEYS

EUROPIUM
See METALS, ALLOYS & COMPOUNDS

EVAPORATORS

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave, Greenwich	Conn
Advanced Technology Labs.	300 Whisman Rd, Mountain View	Cal
Aqua-Chem, Inc.	835 W Grant Ave, Waukesha	Wis
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St, New York 17	NY
Bethlehem Steel Corp.	701 E 3rd St, Bethlehem	Pa
Chicago Bridge & Iron Co.	332 S Michigan Ave, Chicago 4	Ill
Chiyoda Chemical Eng. & Const. Co Ltd	1-30, Shiba-Shinkaido, Minato-Ku, Tokyo, Japan	
DIAMOND POWER SPECIALTY CORP.		
Adv Pg 1	Box 415, Lancaster	Ohio
Edwards High Vacuum, Inc.	3279 Grand Island Blvd, Grand Island	NY
Elion Instruments Inc.	430 Buckley St, Bristol	Pa
FOSTER WHEELER CORP. Adv Pg 130	666 5th Ave, New York 19	NY
Fraser & Co. Ltd., W. J.	Harold Hill, Romford, Essex, England	
General American Transportation Corp.	135 S LaSalle St, Chicago 3	Ill
Graham Mfg. Co., Inc.	195 Gener Neck Rd, Great Neck	NY
Grenzhäuser Maschinenfabrik AG	Lippenfeld 1, Oberhausen Rhld.	Ger
Horton Steel Works, Ltd.	55 Adelaide St. W, Toronto	Ont
Knapp Mills, Inc.	23-15 Border Ave, LIC 3	NY
Leader Iron Works, Inc.	1110 N Jasper St, Decatur	Ill
Maryland Shipbuilding & Drydock Co	Box 687, Baltimore 3	Md
Mechanical Equipment Co. Inc.	851 Carondelet St, New Orleans 13	La
Milnes, Inc.	7870 S W Macadam Ave, Portland 19	Ore
NATIONAL ANNEALING BOX CO.		
Adv Pg 104	Box 520, Washington	Pa
NATIONAL LEAD CO. Adv. Pgs. 60, 61	111 Broadway, New York 6	NY
NERATOMA, N. V., Adv Pg 113-F	Noordelaale 30, The Hague	Neth
Nestor Corp.	1436 S 3rd St, St. Louis 60	Mo
Pfaudler Co. Div, Pfaudler Permutit Inc.	1000 West Ave, Rochester 6	NY
Rotheim Engineering Co. Inc.	7000 W Devon Ave, Chicago	Ill
SAINT-GOBAIN NUCLEAIRE, Adv Pg 129	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Scientific Glass Apparatus Co. Inc.	100 Lakewood Ter, Bloomfield	NJ
Smith Corp., A. O., Atomic & Process Equip. Div.	3533 N 27 St, Milwaukee 1	Wis
Societe Pirsu-Pechiney	360 rue Saint-Honore, Paris 1, France	
Southwestern Engineering Co.	4000 Santa Fe Ave, Los Angeles 58	Cal
STOKES CORP., F. J. Adv Pg 241	5500 Tabor Rd, Philadelphia 20	Pa
Sulzer Bros. Ltd.	Winterthur	Swit
Tecl, S.p.A., Franco	Lugnano, Milan	Ital
Vacuum-Electronic Corp.	Terminal Dr, Plainview	NY
Vacuum Specialties Inc.	34 Linden St, Somerville 5	Mass
Wallace & Tiernan, Inc.	25 Main St, Belleville 9	NJ
WESTINGHOUSE ELEC CORP. STEAM DIV.		
Adv. Pgs. 70, 71	Lester	Pa
Whiting Corp.	157 & Lathrop Sts, Harvey	Ill
York Corp.	Grantley Rd, York	Pa

EXPANSION JOINTS
See BELLOWS & EXPANSION JOINTS

EXPONENTIAL PILES
See REACTORS

EXTRUSION PRESSES
See Under FABRICATING EQUIPMENT

FABRICATING EQUIPMENT—METAL AND CERAMIC
See Also EDDY-CURRENT EQUIPMENT
FURNACES—ANNEALING, MELTING, SINTERING
HARDNESS TESTERS
METALLOGRAPHIC EQUIPMENT
RADIOGRAPHIC EQUIPMENT
ULTRASONIC EQUIPMENT
VIBRATORY POWDER—COMPACTION EQUIPMENT

1. BRAZING
2. DRAWING
3. EXTRUSION
4. MACHINE TOOLS
5. MACHINE TOOLS, REMOTELY CONTROLLED
6. POWDER METALLURGY, COLD PRESSING
7. POWDER METALLURGY, HOT PRESSING
8. ROLLING
9. SWAGING
10. WELDING
11. WELDING—ELECTRON BEAM

A.E.I. Ltd, 19	30 Grosvenor Pl, London SW1, Eng	
AMF ATOMICS, 3, Adv. Pgs. 76, 77, 99	140 Greenwich Ave, Greenwich	Conn
Air Reduction Co, Inc. 1-10-11	150 E 42nd St, New York 17	NY
ALLIED ENGINEERING & PRODUCTION CORP. 2-3-4-5-6-7		
Adv Pg 242	3671 Blanding Ave, Alameda	Cal
Allison Div, Gen. Motors Corp. 10	Box 894, Indianapolis	Ind
Alloys Research & Mfg. Corp. 6-7-8-10	34-32 57th St, Woodside 77	NY
Alloys Unlimited, Inc. 1-2-6-7-8	32-01 43rd Ave, LIC 1	NY
All-State Welding Alloys Co, Inc. 1-10,	Box 300, White Plains	NY
Aluminum Wire & Cable Co. Ltd. 1-3-8-10	2 St, James Sq, London SW1	Eng
Amco Engineering Co. 1-10,	7520 Ainslie St, Chicago 31	Ill
American Gas Furnace Co. 1	140 Spring St, Elizabeth	NJ
American Metal Products Co 8-9-8-9-10	5500 Lindbar Ave, Detroit 4	Mich
Apparecchi Scientifici Federici 4-10	Via Nicone 2, Milan	Ital
Appleby & Ireland, Ltd., 11	Mark Lane, Bemington, Hants	Eng
Archaloi Ceramics, Inc. 6	1 E 57th St, New York 22	NY
Arnold Engineering Co. 8	Box G, Marengo	Ill
Associated Engrg. & Mfg. Corp. 6-7-10	210 Stonehouse Rd, Glen Ridge	NJ
Atlas Titanium, Ltd. 9-8-9	Centre St, Welland, Ont.	Can
Atomic Devel. & Machine Corp. 6-8	15-04 120 St, College Point 56	NY
AUTOCLAVE ENGINEERS, INC. 6		
Adv Pg 209	2930 W 22nd St, Erie	Pa
Baldwin-Lima-Hamilton Corp. 9-8-6-8-9	Dept. N 8, Philadelphia 42	Pa
Barnes Co., W. F. & John, 4-6	301 S Water St, Rockford	Ill
Bell Telephone Mfg. Co., 5	33 Berkenrode, Hoboken/Antwerp	Belg
Belmont Smelting & Refining Works Inc.	322 Belmont Ave, Brooklyn 7	NY
Bendix Corp. Industrial Controls Sect. 6	21800 Wyoming Ave, Detroit 37	Mich
Bolton & Son Ltd., Thomas, 9-3-6	180 Regent St, London W1	Eng
Bradford Co. Div. Electro-Mechanism, Inc. 4-5-6	122 N Glen St, New Britain	Conn
Buffalo Forge Co. 4	490 Broadway, Buffalo 6	NY
CPI Corp, 3-6	Cottage Pl, Mineola	NY
Cambridge Thermionic Corp. 9	445 Concord Ave, Cambridge 38	Mass
Cayuga Machine & Fabricating Co. Inc. 1-5-10	200 W Gould Ave, Depew	NY
Chamillin Engrg. Wm. Ltd. 4	100 Rte de Lyon, Geneva	Switz
Chicago Development Corp. 5-7-10	5610 47th Ave, Riverdale	Md
Chiyoda Chemical Eng & Const Co Ltd 10	1-30, Shiba-Shinkaido, Minato-Ku, Tokyo, Japan	
DEL ELECTRONICS CORP. 3, Adv Pg 28	521 Hunterwood Ave, Hi. Vernon	NY
Delapena & Son Ltd. 1-4	Trowbridge Rd, Chippenham, Gloucester	Eng
Denmal Pilkington Ltd. 10	48, Greyfriar Rd, London N10, England	
DIAMOND POWER SPECIALTY CORP. 6-10		
Adv Pg 1	Box 415, Lancaster	Ohio
Do All Co. 4-5	254 N Laurel Ave, Des Plaines	Ill
Edwards High Vacuum, Inc. 11	3279 Grand Island Blvd, Grand Island	NY
Electric Boat Div Gen Dynamics Corp. 10	Industrial Services Dept, 000, Groton	Conn
Electricite Mon Ete d', 6	11 rue Petit, Clichy Seine	Fr
Evans & Son (Portsmouth) Ltd., L.	Marcyn Wks. 6	Collingwood Ave, Portsmouth, Hants, Eng
EX-CELLO CORP. ATOMICS DIV. 4,5,		
Adv. Pgs. 8, 9	7300 Delmar Blvd, Detroit 32	Mich
Falcrom Co., 1-2-4-10	7 Falcrom Ct, Passaic	NJ
Fanal-Birmingham Co. Inc. 6-8-9	Ansonia	Conn
Fenn Mfg. Co. 9-8-9	300 Fenn Rd, Newington	Conn
Firth Sterling Inc. 6-7	8112 Forbes Ave, Pittsburgh 35	Pa
FLOWLINE CORP. Adv Pg 180	Box Castle	Pa
FOSTER WHEELER CORP. 8-10,		
Adv Pg 130	666 5th Ave, New York 19	NY
Garrett Corp. 11	9851 Sepulveda Blvd, Los Angeles 45	Cal
General Alloys Co. 8-10	600 W 1st St, Boston 27	Mass
General Electric Co. Ltd. of England, 10	Erith, Kent, England	
General Vacuum Corp. 11	81 Hicks Ave, Medford	Mass
Hadfields Ltd. 3	Vulcan Rd, Sheffield 9	Eng
Hamilton Standard Div. United Aircraft Corp.	East, 5, Broad Brook	Conn
Harnischfeger Corp. 10	4600 W National Ave, Milwaukee 46	Wis
Hartford Special Machinery Co. 4	College Hwy, Simsbury	Conn
Heald Machine Co., The, 4-5	10 New Bond St, Worcester 6	Mass
Hitachi, Ltd. 10	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
Horton Steel Works, Ltd. 8-10	55 Adelaide St. W, Toronto	Ont
HUGHES AIRCRAFT CO. NUCLEONICS LAB. 9,		
Adv Pg 203	Box 2097, Fullerton	Cal
Imhof Ltd. Alfred, Ashley Wks. 3	Cowley Mill Rd, Uxbridge, Middx.	Eng
Iowa Industries Inc., 1-6	Box 500, Rockford	Ill
Kearney & Trecker Corp. 4-5	6600 W National Ave, Milwaukee 14	Wis
Kelley Industries Inc., 4	Eighty-Four	Pa
Kiffer Tool & Die Inc., 5-9	6601 Tillman Ave, Cleveland 5	Ohio
KRUESER FABRICATING CO. INC., 1-10,		
Adv Pg 222	Box 1254, Madison 1	Wis
L & S Machine Co. Inc., 4-10	Box 317, N. D. S, Lorain	Pa
LAND-AIR INC. SUB. HYDRAULECTRON INC. 10,		
Adv Pg 204	7444 W Wilson Ave, Chicago 31	Ill
Lincoln Electric Co. Ltd. 10	Black Fen Rd, Welwyn Garden City, Herts	Eng
Lindberg Engineering Co. 1	5400 W Hubbard St, Chicago 13	Ill
LINDE CO. DIV. UCC, 1-10, Adv Pg 225	270 Park Ave, New York 17	NY
Liquid Carbonic Div. Gen. Dynamics Corp. 10	135 S La Salle St, Chicago 3	Ill
Litton Engineering Labs. 1	Box 948, Gross Valley	Cal
Lockheed Aircraft Corp. 6-8-10	Box 551 Burbank	Cal
LONA MACHINE MFG. CO. INC. 2-3-5-8-9,		
Adv Pg 189	114 E 32nd St, New York	NY
Marshall-Stewart Ltd. 4	44 Tower Hill, London EC3, England	
Mason, Hoover & Hassler, Inc. 10	Box 881, Irwin	Pa
Mar Air Ltd. 19	44 Terrace Rd, Walton-on-Thames, Surrey, England	
Monsanto Mfg. Co. 10	800 S San Fernando Blvd, Burbank	Cal
Metal & Thermit Corp. 10	Railway Ave, Rahway	NJ
Metro Ltd. 4	Chobham, Woking, Surrey	Eng
Micro Instrument Co. 4	88 Trowbridge St, Cambridge 38	Mass
NRC EQUIPMENT CORP. NATIONAL RESEARCH CORP. 1-10,		
Adv Pg 220	80 Charlemont St, Newton Highlands 61	Mass
NATIONAL LEAD CO. 1-4-5-6-7-8-9-10,		
Adv. Pgs. 60, 61	111 Broadway, New York 6	NY
National Research Corp, 11	70 Memorial Dr, Cambridge 42	Mass
NERATOMA, N. V., 1-10, Adv Pg 113-F	Noordelaale 30, The Hague	Neth
NEWBORN MACHINE CORP., 1-2-4-10,		
Adv Pg 93	Silver Creek	NY
Norton & Co. Ltd., Sir James Farmer, Adelphi Iron Wks. 3-4-8-9	Salford, 3, Manchester	Eng
Nuclear Metals, Inc. 1-2-3-4-6-7-8-9-10	Box 2126 Concord	Mass
Oregon Metallurgical Corp., 11	Box 484, Albany	Ore
Penn Fibre & Specialty Co. 4	1020 E Wyoming Ave, Philadelphia 24	Pa
Perkin-Elmer Corp. Electro-Optical Div. 5	1070 E Washington Blvd, L A 33	Cal
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. N.	Eindhoven	Neth
Adv Pg 187		
PHOENIX-ANLEGEBAU AG, 8-10,		
Adv Pg 27	August-Thyssen-Str 1, Duesseldorf	Ger
Plasmadyne Corp, 10	3820 S Main St, Santa Ana	Cal
Polyphase Instrument Co. 10	E 4th St, Bridgeport	Pa
PRECISION EXTRUSIONS INC. 3,		
Adv Pg 95	720 E Green Ave, Bensenville	Ill
Pye, Ltd, 8-10	St. Andrews Rd, Cambridge	Eng
Raytheon Co. Computer, Appar. & Eqp. Div. 4-10	215 Crescent St, Waltham 54	Mass
Reinforcing Corp., 9	Westfield Rd, Rowland	NJ
Robertson & Co. Ltd., W. H. A, 9-8-8	Lyons Wks, Bedford	Eng
ROYAL RESEARCH CORP. 10, Adv Pg 21	11324 Dublin Blvd, Hayward	Cal
Salem-Brosius Inc., 10	Box 2222, Pittsburgh 30	Pa
Sciaky Bros. Inc. 10-11	4915 W 67th St, Chicago 38	Ill
Solar Corp. of America, 1	Dunlap	Pa
Sheffield Corp. 6th, Bendix Corp. 4	701 Springfield St, Dayton 1	Ohio
Sheldon & Co. Inc., M. L. 1	300 Lexington Ave, New York 10	NY
Shoncoat Div. Chemalloy Div. 6-7	160 Wanton Hwy, West Hyack	NY
Smith Corp., A. O., Atomic & Process Equip. Div. 10	3533 N 27 St, Milwaukee 1	Wis
STALKER CORP. 1, Adv Pg 206	902 Woodside Ave, Evansville	Mich
STAMAT MFG. CO. INC. 2-6-7-8		
Adv Pg 199	571 Benson Dr, Voorhees	NY
Standard Tel. & Cables Ltd. 1-6-10	29 Glasshouse Yd, London EC 1	Eng
Standard-Thomson Corp., 1	158 Grove St, Waltham 54	Mass
Stewart Engineering Co. 10	467 Bean Creek Rd, Santa Cruz	Cal
STOKES CORP., F. J. 6-7, Adv Pg 241	5500 Tabor Rd, Philadelphia 20	Pa
SYLCOR DIV. SYLVANIA ELEC PRODS. INC. 1-4-10,		
Adv Pg 38	Cantiague Rock Rd, Hicksville	NY
Sylvania Elec Prods Inc. Chem & Met Div. 1-2-3-5-7-8-9-10	Towanda	Pa
Tapco Div. Thompson Ramo Wooldridge Inc. 1-6-10-11	23555 Euclid Ave, Cleveland 17	Ohio
Thermocouple Products Inc. 10	701 N Iowa St, Villa Park	Ill
Torrance Iron Foundry, Inc. 3	1825 W 213th St, Torrance	Cal
Tube Investments Ltd. 2-3-4-8-9	Aston Manor, Birmingham 6	Eng
Ulmer Co., H. W. 1-10-11	5941 San Luis Rey Rd, Oceanside	Cal
United Control Systems, Inc. 5	910 Woodley Rd, Dayton 3	Ohio
United Shoe Machinery Corp. Atomic Power Dept. 10	Balch St, Beverly	Mass
U. S. Controls, Inc., 1	610 Fourth Ave, Brooklyn 15	NY
Vacuum Ind. Applications, Ltd., 11	Netherton Rd, Wishaw, Lanarkshire	Scot
Vacuum Research (Cambridge) Ltd. 1	Quayside, Bridge St, Cambridge, Eng	
Vallourec, Ste, 3	6 rue Daru, Paris 8e	Fr
Wickes, Inc. Electric Products Div. 11	1818 Locust St. St. Louis 3	Mo
Wall Colmonoy Corp. Brazing Processing Div. 1	19044 John R, St, Detroit 3	Mich
Wang Laboratories, 5	12 Harvard Dr, Natick	Mass
Waterbury Farrel Foundry & Machine Co. Div. of Textron, Inc. 2-3-4-8-9	25 W Johnson Ave, Cheshire	Conn
Weldmatic Div. Unitek Corp. 10	950 Royal Oaks Dr, Monrovia	Cal
Western Gold & Platinum Co. 7	825 Harbor Blvd, Belmont	Cal
Willamette Iron & Steel Co., 8	1000 NW Front Ave, Portland 10	Ore

FACE MASKS
See MASKS—PROTECTIVE

FAILED-FUEL DETECTORS
See DETECTORS—BURST-SLUG

FANS & BLOWERS

AEG, Adv Pg 113-A	Hochhaus, Frankfurt/Main, Germany	
A.E.I. Ltd.	30 Grosvenor Pl, London SW1, Eng	
Advanced Technology Labs.	300 Whisman Rd, Mountain View	Cal
Air Controls Inc.	2310 Superior Ave, Cleveland 14	Ohio
Air Marine Motors, Inc.	300 Bay View Ave, Amityville	NY
Amco Engineering Co.	7520 Ainslie St, Chicago 31	Ill
American Air Filter Co.	215 Central Ave, Louisville 8	Ky
American-Standard Industrial Div.	Detroit 32	Mich
American-Standard Prod. (Can) Ltd.	1001 Dupont St, Toronto 4, Ont.	Can
Beach-Russ Co.	480 Lexington Ave, New York 17	NY

Brewer Electric Mfg. Co.	5100 N Ravenswood Ave, Chicago 40	Ill
Buffalo Forge Co.	490 Broadway, Buffalo 5	NY
Canadian Westinghouse Co. Ltd.	Box 510, Hamilton, Ontario, Canada	
Carrier Air Conditioning Co.	Carrier Pkwy, Syracuse 1	NY
Compresseurs a Membrane Carbin	89 Bd. Saint Marcel, Paris 5	Fr
De Havilland Engine Co. Ltd.	Stag Ln, Edgware, Middlesex	Eng
Dollinger, Inc.	4th & Cambria Sts, Philadelphia 33	Pa
Denver Fire Clay Co.	Box 6810, Denver 17	Colo
De Vilbiss Co.	300 Phillips Ave, Toledo 1	Ohio
Eastern Air Services, Inc. Div. Burlaine Corp.	386 Central Ave, Dover	NH
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 600, Groton	Conn
Escher Wyss Ltd.	Zurich, Switzerland	
Fasco Industries, Inc.	255 N Union St, Rochester 2	NY
Gannett Corp.	8861 Sepulveda Blvd, Los Angeles 45	Cal
General American Transportation Corp.	135 S LaSalle St, Chicago 3	Ill
General Electric Co. Ltd. of England	Erith, Kent, England	
Graver-Hendry Co. Inc.	1300 N Elston Ave, Chicago 22	Ill
Gmelin-Hoffmann Sterilende AG	Lessingfeld 1, Oberhausen Rhld.	Ger
HILD FLOOR MACHINE CO. INC. Adv Pg 191	1217 W Washington Blvd, Chicago	Ill
Hitachi, Ltd.	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
Hoover Electric Co	Port Columbus Arpt, Columbus 19	Ohio
Ilg Electric Ventilating Co.	2850 N Pulaski Rd, Chicago 41	Ill
Imhof Ltd. Alfred, Ashley Wts.	Cowley Mill Rd, Uxbridge, Middx.	Eng
Ingersoll-Rand Co.	11 Broadway, New York 4	NY
Joy Mfg. Co. Industrial Div.	H. W. Oliver Bldg, Pittsburgh 22	Pa
KRAUFFUT DIV. GEN. PRECISION, INC. Adv Pg 225	1150 McBride Ave, Little Falls	NJ
Krantz Leitwechsel, H.	Aachen-Richterich	Ger
Matthews & Yates Ltd. Cyclone Wks.	Swinton, Manchester, England	
Midland Heating & Ventilation Co. Ltd.	Bedford Rd, Birmingham 11, England	
Mikro-Clean Products, Inc.	2277 Ford Pkwy, St. Paul 18	Minn
NERATOOM, N. V., Adv Pg 113-F	Noordeinde 38, The Hague	Neth
Oerlikon Engineering Co.	Zurich 50, Switzerland	
Patterson Foundry & Machine Co.	East Liverpool	Ohio
Redmond Co. Inc.	501 Monroe St, Owosso	Mich
Robbins & Myers, Inc.	1345 Lagonda Ave, Springfield	Ohio
Rotron Manufacturing Co.	Hudson St, Woodstock	NY
Sommering-Gras-Fauler AG	Sommeringer Haupt. 38, Vienna 3	Aus
SOCIETE RAVEAU, Adv Pg 113-T	Rue Rotrou Le Coudreuse, Saint	Fr
Stamford Fan Co. Inc.	4 South St, Stamford	Conn
Sulzer Bros. Ltd.	Winterthur	Swit
Tapco Div. Thompson Ramo Wooldridge Inc.	23555 Euclid Ave, Cleveland 17	Ohio
Tinin Mfg. Co.	1133 Raymond St, St. Paul	Minn
Toni, S.p.A., Franco	Legnano, Milan	Ital
Turbocraft Inc.	1966 S Myrtle Ave, Monrovia	Cal
WORTHINGTON CORP. Adv. Pg. 2nd Cover	401 Worthington Ave, Harrison	NJ

FEED-WATER HEATERS
See HEATERS—FEED WATER

FILM-BADGE SERVICES
See SERV. & CONS'LT: FILM BADGE

FILM BADGES
See DOSIMETERS—RADIATION

FILTERS—AIR
See Also AIR-FILTER CHANGERS

A.E.I. Ltd.	33 Grosvenor Pl, London SW1, Eng	
Adams Co. Inc., R. P.	476 E. Park Dr, Buffalo 17	NY
Air Control, Inc.	450 Narberth Ave, Narberth	Pa
Aircraft Porous Media, Inc.	Glen Cove	NY
ALLIED ENGINEERING & PRODUCTION CORP. Adv Pg 242	3621 Blending Ave, Alameda	Cal
American Air Filter Co.	215 Central Ave, Louisville 8	Ky
American Felt Co.	Glenville Rd, Glenville	Conn
Automatic Switch Co.	50M Hanover Rd, Florham Park	NJ
Bailey Meter Co. Ltd.	1010 St. Catherine St, W, Montreal, Que	Can
Bendix Corp. Filter Div.	Box 135, Madison Heights	Mich
CAMBRIDGE FILTER CORP. Adv Pg 127	738 Erie Blvd. E, Box 1288, Syracuse 1	NY
Carrier Air Conditioning Co.	Carrier Pkwy, Syracuse 1	NY
De Vilbiss Co.	300 Phillips Ave, Toledo 1	Ohio
Donaldson Co. Inc.	666 Pelham Blvd. St. Paul 14	Minn
Eractor, Ltd.	Hackwell Ln, Cawston, Somerset	Eng
FLANDERS FILTERS, INC. Adv Pg 7	Box 718, Riverhead	NY
GELMAN INSTRUMENT CO. Adv Pg 233	Box 1184-M, Chelsea	Mich
Hamilton Mfg. Co.	Two Rivers	Wis
HYDRODYNE CORP. Adv Pg 139	7339 Coldwater Canyon Ave. N. Hollywood	Cal
Johnson Corp.	810 Wood St, Three Rivers	Mich
Kalamazoo Bra. Co.	12th & Monroe Sts, Two Rivers	Wis
KENAWHEE SCIENTIFIC EQUIPMENT. Adv Pg 116	4040 Logan St, Adrian	Mich
Kidde & Co. Inc., Walter	177 Main St, Belleville 9	NJ
Matthews & Yates Ltd. Cyclone Wks.	Swinton, Manchester, England	
Midland Heating & Ventilation Co Ltd	Bedford Rd, Birmingham 11	Eng
Millipore Filter Corp.	Bedford	Mass
Nuclear Products Co.	14524 Saranac Rd, Cleveland 10	Ohio
Nuclear Research Applications Ltd.	Bell St, Reigate (Surrey)	Eng
Pall Corp.	Glen Cove	NY
Posthwand Products, Inc.	181 Harvard St, Brookline 46	Mass
Pleuty & Son Ltd. Eagle Iron Works	Newbury, Berks	Eng
Pulverizing Machinery Co. Div. American Machine Co.	Chatham Rd, Summit	NJ
Purolator Products, Inc.	970 New Brunswick Ave, Rahway	NJ
ROYAL RESEARCH CORP. Adv Pg 21	11824 Dublin Blvd, Hayward	Cal
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Sinnerod Produce Ltd.	Hamilton Rd, Sutton Ashfield, Notts	Eng
Staples Co. Air Sampler Div.	783 Fifth Ave, Brooklyn 32	NY
Toni, S.p.A., Franco	Legnano, Milan	Ital
Trinity Equipment Corp.	Box 1178, Garland	NY
Trion Inc.	1000 Island Ave, McKees Rocks	Pa
Vokes Ltd.	Guildford, Surrey	Eng
Wheelabrator Corp. Dust & Fume Control Div.	1485 S Byrkit St, Mishawaka	Ind
York Corp.	Grantley St, York	Pa

FILTERS—BANDPASS

Ad-Yu Electronics Lab. Inc.	249 Terhune Ave, Passaic	NJ
American Electronic Labs.	Colmar	Pa
Biddle Co., James G.	1316 Arch St, Philadelphia 7	Pa
Bird Electronic Corp.	30303 Aurora Rd, Cleveland 39	Ohio
Canadian Marconi Co.	2442 Trenton Ave, Montreal 16	Can
Cawkell Research & Electronics Ltd.	Scotts Rd, Southall, Middx.	Eng
Colombia Technical Corp.	26-30 Halpe-Qu Exp. W, Woodside 77	NY
Dawes Co.	800 W Mt. Pleasant Ave, Livingston	NJ
ESC Electronics Corp.	534 Bergen Blvd, Palisades Park	NJ
Freed Transformer Co. Inc.	1718 Weirfield St, Brooklyn 27	NY
Hermetic Seal Transformer Co. Div. Dresser Ind. Inc.	555 N 5th St, Garland	Tex
KAMAN NUCLEAR, Adv. Pgs. 198, 199	Garden of the Gods Rd, Colo Springs	Colo
Krohn-Hite Corp.	580 Mass. Ave, Cambridge 39	Mass
Litton Industries	336 N Foothill Rd, Beverly Hills	Cal
Murata Seisakusho, Ltd.	1, Tsuzumiyama-machi, Hanaoka, Higashiyama-ku Yamashina, Kyoto	Jap
PCA Electronics Inc.	16799 Schoenborn St, Sepulveda	Cal
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 187	Eindhoven	Neth
Polyphase Instrument Co.	E 4th St, Bridgeport	Pa
Raytheon Co. Industrial Components Div.	55 Chapel St, Newton	Mass
Sickles Div. General Instrument Corp.	165 Front St, Chicopee	Mass
Spencer-Kennedy Labs, Inc.	1320 Soldiers Field Rd, Boston 35	Mass
Standard Winding Co. Div. Ortron Corp.	44-02 Johnson St, Newburgh	NY
Trak Electronics Co. Inc.	Wilton	Conn

FILTERS—FLUID
1. ASBESTOS
2. CERAMIC
3. COTTON
4. GLASS
5. METALLIC
6. PAPER
7. PLASTIC
8. RUBBER
9. SYNTHETIC FIBER
10. MEMBRANE

Adams Co. Inc., R. P. 2-6	476 E. Park Dr, Buffalo 17	NY
Aero-Flow Dynamics, Inc., 4-6	Corry	Pa
Aircraft Porous Media, Inc. 2-5	Glen Cove	NY
Allied Plastics Supply Corp. 7	75 Cliff St, New York 38	NY
Allied Resinous Products, Inc. 7	Whitney Rd, & Clark St, Conneaut	Ohio
American Felt Co. 6-9	Glenville Rd, Glenville	Conn
Bendix Corp. Filter Div. 5-6-9	Box 135, Madison Heights	Mich
CFI Corp. 9	Cottage Pl, Minoola	NY
CAMBRIDGE FILTER CORP. Adv Pg 127	738 Erie Blvd. E, Box 1288, Syracuse 1	NY
Carborundum Co. Refractories Div. 3-6	Perth Amboy	NJ
Carborundum Co. R & D Div. 9	New Prods. Dr. MRC, Niagara Falls	NY
Chem-Pure Service Co. 6	782 Industrial Rd, San Carlos	Cal
Corning Glass Works, Shielding Radiation. 2-4	Corning	NY
CRAWFORD FITTING CO. 5, Adv Pg 53	884 E 140 St. Cleveland 10	Ohio
Crull-Reynolds Engineering Co. 6	1123 Main St, Stamford	Conn
Cuno Engineering Corp. 3-5-9	80 S Vine St, Meriden	Conn
Donaldson Co. Inc. 6	666 Pelham Blvd, St. Paul 14	Minn
Dorr-Oliver Inc. 3-4-5-7-8-9	77 Havemeyer Ln, Stamford	Conn
Durkee Co. Inc. 5	450 N Findlay St, Dayton 4	Ohio
Ernel Engineering Corp. 1-6-10	Kingston 31	NY
FIP, 7	Via F Cairoli 5, Sori Genoa	Ital
Felten Co., The, 9	320 South St, Boston 11	Mass
FISH-SCHURMAN CORP. 6, Adv Pg 234	70 Portman Rd, New Rochelle	NY
FLANDERS FILTERS, INC. 2, Adv Pg 7	Box 718, Riverhead	NY
GELMAN INSTRUMENT CO. 1-4-6-7-8-10, Adv Pg 233	Box 1184-M, Chelsea	Mich
Harvey & Co. (London) Ltd., G. A. 5	Woolwich Rd, London, SE7	Eng
Hoke, Inc. 5	1 Tenakill Pk, Cresskill	NJ
HYDRODYNE CORP. 5, Adv Pg 139	7339 Coldwater Canyon Ave. N. Hollywood	Cal
Imperial-Eastman Corp. 6	6200 W Howard St, Chicago 48	Ill
Ish-O-Reinbeck, 9	Reinbek, Bz. Hmb.	Ger
Johns-Manville, 1-6-7	22 E 40th St, New York 16	NY
Kembey & Marriott Co. 1	Ambler	Pa
NERATOOM, N. V., 6, Adv Pg 113-F	Noordeinde 38, The Hague	Neth
Newark Wire Cloth Co. 5	352 Verona Ave, Newark 4	NJ
Norton Co. 5	1 New Bond St, Worcester 6	Mass
Nuclear Products Co. 5	14524 Saranac Rd, Cleveland 10	Ohio
Ohio Filtration Engineers Div. Amer. Ldry. Mach'y. Co. 2-3-6-9-10	8034 Section Ave, Cinc 12	Ohio
Pall Corp. 2-4-5-6-7-9	Glen Cove	NY
Posthwand Products, Inc. 3	181 Harvard St, Brookline 46	Mass
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. 5, Adv Pg 187	Eindhoven	Neth
Pittsburgh Plate Glass Co. 6	632 Fifth Duquesne Blvd, Pittsburgh 22	Pa
Purolator Products, Inc. 2-6-7	970 New Brunswick Ave, Rahway	NJ
Radiation Applications, Inc. 2-6-7-9-10	36-40 37th St, Long Island City 1	NY
Raybestos-Manhattan, Inc. 1	Arnold & Stringel Sts, Manheim	Pa
SAINT-GOBAIN NUCLEAIRE, 4-6, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Salem-Brosius Inc., 10	Box 2223, Pittsburgh 30	Pa
Saxonburg Ceramics, Inc. 2	Box 187, Saxonburg	Pa
Scientific Glass Apparatus Co. Inc., 4	100 Lakewood Ter, Bloomfield	NJ
Selas Corp. of America, 2	Dresher	Pa
Sinnerod Products Ltd. 6	Hamilton Rd, Sutton Ashfield, Notts, Eng.	
Star Porcelain Co. 5	21 Muirhead Ave, Trenton	NJ
Telecomputing Corp. 8	8136 Aero Dr, San Diego 11	Cal
Vokes Ltd. 1-2-3-4-5-6-9	Guildford, Surrey	Eng
Whiting Corp. 6	187 & Lathrop Sts, Harvey	Ill
Will Corp. 6	Box 1050, Rochester 3	NY
Zenith Optical Lab. 4	75 Main St, Dobbs Ferry	NY

FILTERS—R-F

Ace Engineering & Machine Co. Inc.	Tomlinson Rd, Huntingdon Valley	Pa
Aircraft Porous Media, Inc.	Glen Cove	NY
Allen-Bradley Co.	136 W Greenfield Ave, Milwaukee 4	Wis
American Electronic Labs.	Colmar	Pa
American Felt Co.	Glenville Rd, Glenville	Conn
Anton Corp.	555 Chestnut Ave, East Newark	NJ
Bendix Corp-Bendix Pacific Div.	11600 Sherman Way, N Hollywood	Cal
Bird Electronic Corp.	30303 Aurora Rd, Cleveland 39	Ohio
BLICKMAN, INC., S., Adv Pg 180	7900 Gregory Ave, Weehawken	NJ
Canadian Marconi Co.	2442 Trenton Ave, Montreal 16	Can
CARAD CORP. Adv Pg 224	3201 Jacques Saxe Blvd, Palo Alto	Cal
Colombia Technical Corp.	26-30 Halpe-Qu Exp. W, Woodside 77	NY
Consolidated Electronics Div. Pac. Pac. Elec. Co.	50 Paris St, Newark 1	NJ
Crull-Reynolds Engineering Co.	1123 Main St, Stamford	Conn
Dawes Co.	800 W Mt. Pleasant Ave, Livingston	NJ
Electro Corp. Scientific Instrument Div.	18 W 46th St, New York 36	NY
General Radio Co.	West Concord	Mass
Hallett Mfg. Co.	5710 Bowcroft St, Los Angeles 16	Cal
Hewlett-Packard Co.	1501 Page Mill Rd, Palo Alto	Cal
Keystone Products Co.	894-6 23rd St, Union City	NJ
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
PCA Electronics Inc.	16799 Schoenborn St, Sepulveda	Cal
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 187	Eindhoven	Neth
Polyphase Instrument Co.	E 4th St, Bridgeport	Pa
Raytheon Co. Ind. Comps. Div.	55 Chapel St, Newton	Mass
Sangamo Electric Co.	11 & Converse Sts, Springfield	Ill
Sickles Div. Gen. Instrument Corp.	165 Front St, Chicopee	Mass
Spencer-Kennedy Labs., Inc.	1320 Soldiers Field Rd, Boston 35	Mass
Sprague Electric Co.	Marshall St, North Adams	Mass
Standard Winding Co. Div. Ortron Corp.	44-02 Johnson St, Newburgh	NY
Valor Instruments, Inc.	13214 Crenshaw Blvd, Gardena	Cal

FILTERS—RADIATION
See ABSORBERS—RADIATION

FISSION CHAMBERS
See CHAMBERS—FISSION

FITTINGS—PIPE
See PIPE FITTINGS

FLANGES—PIPE

Aeroquip - Marmon Div.	11214 W Exposition Blvd. L A 64	Cal
Alco Products, Inc.	Box 1053, Schenectady 8	NY
Alloy Flange & Fitting Corp.	39-30 Review Ave, LIC 1	NY
Aluminum Co. of America	1001 Alcoa Bldg, Pittsburgh 19	Pa
Bennett & Wilson Ltd.	209 Euston Rd, London NW 1	Eng
Cazal Ltd., Francis	Africa House, Kingsway, London WC1	Eng
Corning Glass Works, Shielding Radiation	Corning	NY
Crane Co. Ind. Prods Gr.	4100 S Kedzie Ave, Chicago 32	Ill
Durapipe & Fittings, Ltd.	56 Kingway, London, WC2, England	
Flight Refueling Inc.	Box 1797, Baltimore 3	Md
Harvey & Co. (London) Ltd., G. A.	Woolwich Rd, London, SE7	Eng
HYDRODYNE CORP. Adv Pg 139	7339 Coldwater Canyon Ave. N. Hollywood	Cal
Ladish Co.	5481 S Packard Ave, Cudahy	Wis
Mack Iron Works Co.	Warren & Water Sts, Sandusky	Ohio
MIDWEST PIPING DIV. CRANE CO. Adv Pg 183	1428 S Second St, St. Louis 3	Mo
PHOENIX-RHEINROHR AG, Adv Pg 27	August-Thyssen-Str 1, Duesseldorf	Ger
Pittsburgh Piping & Equipment Co.	158 49th St, Pittsburgh	Pa
RUHRSTAHL AG, Adv Pg 113-E	Bochumer Str. 38, Witten-Ruhr	Ger
Sheldon & Co. Inc., M. L.	360 Lexington Ave, New York 16	NY
Sommering-Gras-Fauler AG	Sommeringer Haupt. 38, Vienna 3	Aus
Talbot Steel Tube Co. Ltd.	Green Ln, Walsall, Staffs, England	
Taylor Forge & Pipe Works	Box 486, Chicago	Ill
Toni, S.p.A., Franco	Legnano, Milan	Ital
Tube Turns Div. Chemetron Corp.	234 E Broadway, Louisville 1	Ky

FLOW COUNTERS
See COUNTERS—RADIATION

FLOW INDICATORS
See CONTROLS—FLUID-FLOW
METERS—FLOW
TRANSDUCERS

FLUID MECHANICS—TESTS & ANALYSIS
See SERV. & CONS'LT: FLUID MECHANICS—TESTS & ANALYSIS

FLUORIMETERS

Cameca	17 Bd. de la Libération, 78, Denis, Seine	Fr
GILMAN INSTRUMENT CO. Adv Pg 233	Box 118-M, Chelsea	Mich
Hilger & Watts, Ltd.	98 St. Pancras Way, London NW 1, Eng	

FLUOROSCOPES—X-RAY

Curtiss-Wright Corp. Princeton Div.	Box 110, Princeton	NJ
Mitchell Radiation Products Corp.	E Washington St, Norristown	Pa
Picker X-Ray Corp.	25 S Broadway, White Plains	NY
Siemens & Halske AG	Rheinbrueckenstr. 50, Karlsruhe	Ger
X-Ray Dept. of General Electric Co.	4855 Electric Ave, Milwaukee	Wis

FOILS—NEUTRON-DETECTION

ATOMIC ACCESSORIES, INC., Adv Pg 286	811 W Merrick Rd, Valley Stream	NY
Bram Metallurgical-Chemical Co.	630 65th Ave, Philadelphia 26	Pa
Chemirare Corporation of America	Box 1209, Waterbury 20	Conn
CONTROLS FOR RADIATION, INC. Adv Pg 189	130 Alewife Brook Pkwy Cambridge 40	Mass
ENGELHARD, HERAEUS & SHER, INC. Adv Pg 185	140 Brookline Ave, Boston 15	Mass
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. Adv Pg 2	Box 696, Attleboro	Mass
NUCLEAR-CHICAGO CORP. Adv. Pgs. 54-57	345 E Howard Ave, Des Plaines	Ill
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC) Adv. Pgs. 217, 219, 221	1000 Warren St, Apollo	Pa
OAK RIDGE TECHNICAL ENTERPRISES CORP. Adv Pg 229	Box 324, (NSOC), Oak Ridge	Tenn
Picker X-Ray Corporation	1270 Mamaroneck Ave, White Plains	NY
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	663 Merrick Rd, Lynbrook	NY
REACTOR EXPERIMENTS, INC. Adv Pg 26	148 Harbor Blvd, Belmont	Cal
TELEPLEX INC. Adv Pg 249	Church Rd, North Wales	Pa
Universal Nuclear Corp.	107-09 Continental Ave, Forest Hills 75	NY

FORGINGS

Alco Products, Inc.	Box 1005, Schenectady 5	NY
Allegheny Ludlum Steel Corp.	Oliver Bldg, Pittsburgh 22	Pa
Alloy Flange & Fitting Corp.	39-00 Review Ave, LIC 1	NY
Atlas Tiranium, Ltd.	Centre St, Welland, Ont.	Can
Baldwin-Lima-Hamilton Corp.	Dept N S, Philadelphia 42	Pa
Bethlehem Steel Corp.	701 E 3rd St, Bethlehem	Pa
Bonney Forge & Tool Works	Cedar & Meadow Sts, Allentown	Pa
Cameron Iron Works	Box 1212, Houston	Tex
Carborundum Metals Co.	Akron	NY
Chase Brass & Copper Co.	236 Grand St, Waterbury	Conn
English Steel Corp. Ltd. River Don Wks.	Sheffield 8, Yorkshire, England	
Firth-Derihon Stampings Ltd.	Derby Dale, Hc. Mexborough, Derbyshire, Eng	
Hadfields Ltd.	Vulcan Rd, Sheffield 9	Eng
HARVEY ALUMINUM, Adv Pg 39	19200 S Western Ave, Torrance	Cal
Ladish Co.	5481 S Packard Ave, Cudahy	Wis
Lemon & Sons, Inc., Charles E.	5200 N Kenton Ave, Chicago	Ill
MIDWEST PIPING DIV. CRANE CO. Adv Pg 183	1430 S Second St. St. Louis 4	Mo
Nitram Drop Forging Co.	86 Walker St, Springfield 7	Mass
National Forge Co	Irvine, Warren City	Pa
NERATOOM, N. V., Adv Pg 113-F	Noordeinde 38, The Hague	Neth
Nuclear Metals, Inc.	Box 1223 Concord	Mass
Oneida Engines Ltd.	Box 4015 Terminal A, Toronto	Can
Pacific Valves, Inc.	3501 Walnut Ave, Long Beach	Cal
RUHRSTAHL AG, Adv Pg 113-E	Stockumer Str. 28, Witten-Annen	Ger
Schoeller-Bleckmann Steel Wks Ltd.	2 Wildpretmarkt, Vienna 1	Aus
Steel Improvement & Forge Co., The	970 E 64 St, Cleveland 3	Ohio
Tapco Div. Thompson Ramo Wooldridge Inc.	23555 Euclid Ave, Cleveland 17	Ohio
Taylor Forge & Pipe Works	Box 485, Chicago	Ill
Teal, S.p.A., Fonte	Legnano, Milan	Ital
Tube Turns Div. Chemetron Corp.	256 E Broadway, Louisville 1	Ky
U. S. STEEL CORP., Adv. Pgs. 30, 31	525 Wm. Penn Pl, Pittsburgh 30	Pa
Wyman-Gordon Co.	105 Madison St, Worcester	Mass

FOUNTAINS—EYE
See Also DECONTAMINATING EQUIPMENT

HAYS DRINKING FAUCET CO. Adv Pg 66	1439 Fourth St. Berkeley 10	Cal
Logan Emergency Showers, Inc.	136 N Maryland Ave, Box 111, Glendale	Cal

FUEL—"COLD" SCRAP RECOVERY
See SERV. & CONS'LT: FUEL-SCRAP RECOVERY, "COLD"

FUEL-ELEMENT STORAGE EQUIPMENT
See SHIELDING—RADIATION CONTAINERS—FUEL ELEMENT ("COLD")

FUEL ELEMENTS
See Also FABRICATING EQUIPMENT
FUEL-ELEMENT STORAGE EQUIPMENT
METALS, ALLOYS & COMPOUNDS—THORIUM, URANIUM
REFUELING EQUIPMENT—REACTOR
SERV. & CONS'LT: FUEL SCRAP RECOVERY, THORIUM CONVERSION, URANIUM CONVERSION, REACTOR FUEL ELEMENTS

TYPES OFFERED:
1. ALUMINUM
2. CERAMICS
3. CERMETS
4. GRAPHITE
5. HIGHLY ENRICHED U
6. POWDER COMPACTS
7. STAINLESS STEEL
8. ZIRCONIUM
9. BERYLLIUM

AMF Atomics Div. AMF Canada Ltd. 1-9-5-7-8	Port Hope, Ont.	Can
Aerojet-General Nucleonics, 2-3-4-5-6-7-8	Box 77, San Ramon	Cal
Alco Products, Inc. 6-7	Box 1005, Schenectady 5	NY
Alloys Research & Mfg. Corp. 6	34-32 57th St, Woodside 77	NY
Alloys Unlimited, Inc. 1-9-5	23-01 43rd Ave, LIC 1	NY
American Metal Products Co 1-2-3-4-5-6-7-8	8000 Lonsdale Ave. Detroit 6	Mich
Atlas Tiranium, Ltd. 8	Centre St, Welland, Ont.	Can
Atomics International Div. NAA Inc. 1-2-3-4-5-6-7-8	Box 309, Canoga Park	Cal
AVERY & SAUL CO. 7, Adv Pg 73	115 Rindge Ave. Cambridge	Mass
BABCOCK & WILCOX CO. 1-3-4-5-6-7-8, Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
BELGONUCLEAIRE, 4, Adv Pg 113-L	35 rue des Colonies, Brussels 1	Belg
Canadian General Electric Co Ltd., 1-2-4-8	107 Park St, Petersborough, Ont.	Can
Carborundum Co, E & D Div, 5	New Prod. Dr. NFC, Niagara Falls	NY
Combustion Engineering, Inc. 1-2-3-4-6-7-8-9	200 Madison Ave, New York 16	NY
Curtiss-Wright Corp, Research Div. 1-2-3-7	Quehanna	Pa
Degussa, 8-9	Box 2080 Frankfurt/Main	Ger
DRESSER PRODUCTS, INC. 3-4-6-7-8 Adv Pg 200	Great Barrington	Mass
Engelhard Industries, Inc. D. E. Makepeace Div. 1-5-6-7-8	Plant & Denham Sts. Attleboro	Mass
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. 1-2-3-4-5-6-7-8-9, Adv Pg 202	Box 608, San Diego 12	Cal
GENERAL ELECTRIC CO. APPARATUS SALES, 1-3-5-6-7-8, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
Hadfields Ltd. 7	Vulcan Rd, Sheffield 9	Eng
Hitachi, Ltd. 1-3-7-9	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
Kayser Elliott & Co. Ltd. 7	Carlisle Steel Wks, Sheffield, 4	Eng
MARTIN CO. NUCLEAR DIV. 1-2-3-4-5-6-7-8, Adv Pg 5	Baltimore 3	Md
Metallurgie & Mécanique Nucléaire (MMN) 1-2-5-6-7	33 rue Vein de Liège, Hental, Liège	Bel
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. 1-2-3-4-5-6-7-8-9, Adv Pg 2	Box 696, Attleboro	Mass
NATIONAL CARBON CO. DIV. OF UCC, 4, Adv. Pgs. 96, 97	270 Park Ave. New York 17	NY
NATIONAL LEAD CO. 1-2-3-4-5-6-7-8, Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), 1-3-4, Adv. Pgs. 217, 219, 221	1000 Warren St. Apollo	Pa
Nuclear Metals, Inc. 1-2-3-4-5-6-7-8	Box 1223 Concord	Mass
Nukem, GmbH, 1-2-3-4-5-6-7-8	Wolfgang bei Hanau/Main	Ger
PECHINEY, 1-2-3-4-6-8, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
SAINT-GOBAIN NUCLEAIRE, 1, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Schoeller-Bleckmann Steel Wks Ltd. 7	2 Wildpretmarkt, Vienna 1	Aus
Steel-Alloys Inc. 1	50 N Macquesten Pkwy, Mt. Vernon	NY
SHOWA DENKO K. K., 1-3-4-6, Adv Pg 113-G	34 Shiba Hyusuno-cho, Minato-ku, Tokyo	Jap
Sigri-Kohlefabrikate GmbH, 4	Meitingen ober Augsburg	Ger
Société Industrielle De Combustible Nucléaire 1-5-7	60 rue de Monceau, Paris 8	Fr
Speer Carbon Co. 4	Thomas St. St. Marys	Pa
SYLCOR DIV. SYLVANIA ELEC PRODS. INC. 1-3-5-6-7-8, Adv Pg 36	Cantiague Rock Rd. Hicksville	NY
UNITED NUCLEAR CORP. 1-3-5-6-7-8-9-7-8-9, Adv Pg 26	563 Winchester Ave. New Haven 4	Conn
WESTINGHOUSE ELEC. CORP. ATOMIC FUEL DEPT. 1-2-3-5-6-7-8, Adv. Pgs. 121 & 78, 71	Cheswick	Pa

FUELS—REACTOR
See FUEL ELEMENTS
SERV.& CONS'LT: REACTOR FUEL ELEMENTS—RESEARCH & DEVELOPMENT

FUME HOODS

Air Control, Inc.	400 Nesbeth Ave, Nesbeth	Pa
ALLIED ENGINEERING & PRODUCTION CORP., Adv Pg 242	2421 Blanding Ave. Alameda	Cal
BLICKMAN, INC., S., Adv Pg 180	7900 Gregory Ave. Weehawken	NJ
Bowers-Moore Co.	110 E Broadway, Muskegon	Mich
CONTROLLED ATMOSPHERE ENCLOSURES MFG CO Adv Pg 38	Leonard Air Base, Horsham	Pa
Dwelsh Equipment Corp.	980 Linwood St, Brooklyn 8	NY
Gallenkamp & Co. Ltd., A.	Sun St, London, E. C. 2, England	
Hamilton Mfg. Co.	Two Rivers	Wis
Hoveg Industries Inc.	800 Greenbank Rd. Wilmington 8	Del
Kelley & Co., G. G.	98 Taylor St, Boston 20	Mass
Kewaunee Mfg. Co.	2003 E Centre St. Adrian	Mich
Laboratory Furniture Co. Inc.	Old County Rd. Mineola	NY
Leal Fabricators, Inc	25 Belgrove Dr, Kearny	NJ
Matthews & Yates Ltd, Cyclone Wks.	Swinton, Manchester, England	
Metalab Equipment Co.	570 Duffy Ave, Hicksville	NY
Mosco Ltd.	Chobham, Woking, Surrey	Eng
PERMALI, INC. Adv Pg 197	Box 718, Mt. Pleasant	Pa
Plastmaster Corp.	5204 SE 7th Ave, Portland 14	Ore
ROYAL RESEARCH CORP. Adv Pg 37	11824 Dublin Blvd. Hayward	Cal
Temperature Engineering Corp.	2240 Tempcor Blvd, Riverton	NJ
Wazee Corp.	5901 Brighton Rd. Pittsburgh 13	Pa
Wheelabrator Corp. Dust & Fume Control Div.	1400 S Byfield St, Mishawaka	Ind

FURNACES—ANNEALING
1. INERT-ATMOSPHERE
2. VACUUM

A.E.I. Ltd. 2	33 Grosvenor Pl, London SW1, Eng	
Alloys Research & Mfg. Corp. 1-2	34-32 57th St, Woodside 77	NY
American Gas Furnace Co. 1	140 Spring St. Elizabeth	NJ
Atlas Tiranium, Ltd. 1-2	Centre St, Welland, Ont.	Can
Cameron, 1-2	Box 6004, Jacksonville 7	Fla
Consolidated Electrodynamics Corp. 2	300 Sierra Madre Villa, Pasadena	Cal
Consolidated Vacuum Corp. 2	1775 Mt. Read Blvd, Rochester	NY
Elverth High Vacuum, Inc. 2	2270 Grand Island Blvd, Grand Island	NY
GENERAL ELECTRIC CO. APPARATUS SALES, 1-2, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Electric Co. Ltd. of England, 1-2	Erith, Kent, England	
General Eng. Co. (Radcliffe) Ltd. 2	Bury Rd, Radcliffe, Lancs.	Eng
General Vacuum Corp. 2	81 Hicks Ave. Medford	Mass
Grieve-Hendry Co. Inc. 2	1360 N Elston Ave. Chicago 22	Ill
Hevi-Duty Electric Co. Div. Basic Products Corp. 1-2	504 Hart St. Watertown	Wis
Ipsen Industries, Inc. 1-2	Box 550, Rockford	Ill
KEWAUNEE SCIENTIFIC EQUIPMENT, 2, Adv Pg 178	4042 Logan St. Adrian	Mich
Kinney Vacuum Div. The N. Y. Air Brake Co. 2	3650 Washington St. Boston 30	Mass
KRUEGER FABRICATING CO. INC. 2, Adv Pg 222	Box 1284, Madison 1	Wis
L J Products, 1	7484 Glenoi Ave. La Jolla	Cal
LEPEL HIGH FREQUENCY LABS. 1-2, Adv Pg 30	36-10 33th Ave. Woodside	NY
Lindberg Engineering Co. 1-2	2450 W Hubbard St. Chicago 22	Ill
Liquid Metals, Inc. 1-2	Box 2066, Westfield	Mass
Litton Engineering Labs. 1	Box 840, Gene Valley	Cal
NRC EQUIPMENT CORP. NATIONAL RESEARCH CORP. 2, Adv Pg 239	60 Charlemont St. Newton Highlands 61	Mass
National Research Corp. 2	70 Memorial Dr, Cambridge 42	Mass
New York Air Brake Co. 2	230 Park Ave, New York 17	NY
Nuclear Metals, Inc. 1-2	Box 1223 Concord	Mass
Nukem, GmbH, 1-2	Wolfgang bei Hanau/Main	Ger
Rockwell Co., W. S. 1-2	200 Elm St. Fairfield	Conn
Salem-Brosius Inc., 1	Box 10222, Pittsburgh 36	Pa
Stewart Engineering Co. 1	407 Bear Creek Rd. Santa Cruz	Cal
STOKES CORP., F. J. 2, Adv Pg 241	5500 Tabor Rd. Philadelphia 20	Pa
Surface Combustion Div. Midland-Ross Corp. 1	2375 Dorr St. Toledo 1	Ohio
SYLCOR DIV. SYLVANIA ELEC PRODS. INC. 1-2, Adv Pg 36	Cantiague Rock Rd. Hicksville	NY
Ultron Co., H. W. 2	2041 San Luis Rey Rd. Oceanside	Cal
Union Steel Corp. 1	1660 Ashwood Tow, Union	NJ
Vacuum Ind. Applications, Ltd., 2	Netherton Rd, Widnes, Lancashire	Scot
Vacuum Research (Cambridge) Ltd. 1-2	Quayside, Bridge St, Cambridge, Eng	
Vacuum Specialties Inc. 1-2	26 Linden St. Somerville 3	Mass

FURNACES—COMBUSTION

American Gas Furnace Co.	140 Spring St, Elizabeth	NJ
Atlas Tiranium, Ltd.	Centre St, Welland, Ont.	Can
Burrell Corp.	2200 5th Ave, Pittsburgh 19	Pa
CENTRAL SCIENTIFIC CO. Adv Pg 112	1700 Irving Park Rd. Chicago 13	Ill
Chiyoda Chemical Eng. & Const. Co Ltd	1-10, Hibiya-Shinkami, Minato-Ku, Tokyo, Japan	
Denver Fire Clay Co.	Box 5536, Denver 17	Colo
FOSTER WHEELER CORP. Adv Pg 130	666 5th Ave. New York 19	NY
Gallenkamp & Co. Ltd., A.	Sun St, London, E. C. 2, England	
Gordon Co., Claud S.	650 N 20 St, Chicago 16	Ill
Grieve-Hendry Co. Inc.	1360 N Elston Ave. Chicago 22	Ill
Hannes S.A. Ateliers, J.	Monceau-sur-Sambre	Belg
Hevi-Duty Electric Co. Div. Basic Products Corp.	504 Hart St. Watertown	Wis
Ipsen Industries, Inc.	Box 550, Rockford	Ill
Laboratory Equipment Corp.	St. Joseph	Mich
Lindberg Engineering Co.	2450 W Hubbard St. Chicago 22	Ill
Nesbitt Thermometer Co. Inc.	134 Livingston St. Brooklyn 1	NY
Rockwell Co., W. S.	200 Elm St. Fairfield	Conn
Selas Corp. of America	Dresher	Pa

Surface Combustion Div. Midland-Ross Corp. ..... 2375 Dorr St, Toledo 1 ..... Ohio
Whiting Corp. ..... 157 & Lathrop Sts. Harvey Ill

FURNACES—CONSTANT-TEMPERATURE

A.E.I. Ltd. ..... 33 Grosvenor Pl, London SW1, Eng
Alloy Research & Mfg. Corp. ..... 34-32 57th St, Woodside 77 ..... NY
American Gas Furnace Co. ..... 140 Spring St, Elizabeth ..... NJ
Atlas Titanium, Ltd. ..... Centre St, Welland, Ont. ..... Can
BAIRD-ATOMIC INC. Adv Pg 87 ..... 33 University Rd, Cambridge 38 ..... Mass
Bethlehem Corp ..... 225 W 2nd St, Bethlehem ..... Pa
Chiyoda Chemical Eng. & Const. Co Ltd ..... 1-30, Shiba-Shinbashi, Minato-Ku, Tokyo, Japan
Delta Design, Inc. ..... 3108 Adams Ave, San Diego 16 ..... Cal
Denver Fire Clay Co. ..... Box 5616, Denver 17 ..... Colo
Gordon Co., Claud S. ..... 619 W 20 St, Chicago 16 Ill
Grieve-Hendry Co. Inc. ..... 1380 N Elston Ave, Chicago 22 Ill
Hevi-Duty Electric Co. Div. Basic Products Corp. ..... 304 Hart St, Watertown ..... Wis
Ipsen Industries, Inc. ..... Box 500, Rockford Ill
L.J Products ..... 7664 Girard Ave, La Jolla ..... Cal
LEPEL HIGH FREQUENCY LABS.
Adv Pg 38 ..... 54-18 37th Ave, Woodside ..... NY
Lindberg Engineering Co. ..... 2650 W Hubbard St, Chicago 12 Ill
Lydon Bros. Inc. ..... 85 Zabriskie St, Hackensack ..... NJ
Molaun Lab. Equipment Co. Inc. ..... 1831 1st Ave, New York 28 ..... NY
Nabem, GmbH ..... Wolfgang bei Hanau/Main ..... Ger
Nunberg Thermometer Co. Inc. ..... 124 Livingston St, Brooklyn 1 ..... NY
Stewart Engineering Co. ..... 467 Bean Creek Rd, Santa Cruz ..... Cal
STOKES CORP., F. J. Adv Pg 241 ..... 5500 Tabor Rd, Philadelphia 20 ..... Pa
Surface Combustion Div. Midland-Ross Corp. ..... 2375 Dorr St, Toledo 1 ..... Ohio
Whiting Corp. ..... 157 & Lathrop Sts. Harvey Ill

FURNACES—LABORATORY

American Gas Furnace Co. ..... 140 Spring St, Elizabeth ..... NJ
Atlas Titanium, Ltd. ..... Centre St, Welland, Ont. ..... Can
Burrell Corp. ..... 2223 5th Ave, Pittsburgh 19 ..... Pa
Cannon ..... Box 5066, Jacksonville 7 ..... Fla
CENTRAL SCIENTIFIC CO. Adv Pg 112 ..... 1700 Irving Park Rd, Chicago 13 Ill
Curtiss-Wright Corp. Princeton Div. ..... Box 110, Princeton ..... NJ
Degussa ..... Box 2993 Frankfurt/Main ..... Ger
Delta Design, Inc. ..... 3108 Adams Ave, San Diego 16 ..... Cal
Denver Fire Clay Co. ..... Box 5616, Denver 17 ..... Colo
Engelhard Industries, Inc. ..... 113 Astor St, Newark 3 ..... NJ
Gallenkamp & Co. Ltd., A. ..... Sun St, London, E. C. 2, England
General Electric Co. Ltd. of England ..... Erith, Kent, England
General Vacuum Corp. ..... 81 Hicks Ave, Medford ..... Mass
Gordon Co., Claud S. ..... 619 W 20 St, Chicago 16 Ill
Grieve-Hendry Co. Inc. ..... 1380 N Elston Ave, Chicago 22 Ill
HARPER ELECTRIC FURNACE CORP.
Adv Pg 114 ..... 57 River St, Buffalo 2 ..... NY
Hevi-Duty Electric Co. Div. Basic Products Corp. ..... 304 Hart St, Watertown ..... Wis
Ipsen Industries, Inc. ..... Box 500, Rockford Ill
L.J Products ..... 7664 Girard Ave, La Jolla ..... Cal
Laboratory Equipment Corp. ..... St. Joseph ..... Mich
Leeds & Northrup Ltd. ..... Broad St, Birmingham 15 ..... Eng
Lindberg Engineering Co. ..... 2650 W Hubbard St, Chicago 12 Ill
Lydon Bros. Inc. ..... 85 Zabriskie St, Hackensack ..... NJ
Molaun Lab. Equipment Co. Inc. ..... 1831 1st Ave, New York 28 ..... NY
Nabem, GmbH ..... Wolfgang bei Hanau/Main ..... Ger
Nunberg Thermometer Co. Inc. ..... 124 Livingston St, Brooklyn 1 ..... NY
RADIATION EQUIP. & ACCESSORIES CORP.
Adv. Pg. 3rd Cover ..... 465 Merrick Rd, Lynbrook ..... NY
Research Inc. ..... Box 6194, Edina Sta, Minpls 36 ..... Minn
Selas Corp. of America ..... Dresher ..... Pa
STOKES CORP., F. J. Adv Pg 241 ..... 5500 Tabor Rd, Philadelphia 20 ..... Pa
Vacuum Research (Cambridge) Ltd. ..... Quayside, Bridge St, Cambridge, Eng
Will Corp. ..... Box 1008, Rochester 3 ..... NY

FURNACES—MELTING

1. ARC
2. INDUCTION
3. INERT-ATMOSPHERE
4. VACUUM
5. ELECTRON-BEAM

A.E.I. Ltd. 1-3-5-4 ..... 33 Grosvenor Pl, London SW1, Eng
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, 2
Adv Pg 112-3 ..... Charleroi ..... Belg
Atlas Titanium, Ltd. 1-3-4 ..... Centre St, Welland, Ont. ..... Can
Cannon, 4 ..... Box 5066, Jacksonville 7 ..... Fla
Carborundum Metals Co. 3-4 ..... Akron ..... NY
Consolidated Vacuum Corp. 1-3-4 ..... 1775 Mt. Read Blvd, Rochester ..... NY
Delta Design, Inc. 4 ..... 3108 Adams Ave, San Diego 16 ..... Cal
Edwards High Vacuum, Inc. 4-5 ..... 3279 Grand Island Blvd, Grand Island ..... NY
GENERAL ELECTRIC CO. APPARATUS SALES, 3-4,
Adv. Pgs. 11, 13 ..... 1 River Rd, Schenectady 5 ..... NY
General Electric Co Ltd of England 1-2-3-4 ..... Erith, Kent, England
General Vacuum Corp. 4-5 ..... 81 Hicks Ave, Medford ..... Mass
Grieve-Hendry Co. Inc. 3-4 ..... 1380 N Elston Ave, Chicago 22 Ill
Harper & Co. Inc., William J. 3-4 ..... Box 948, West Caldwell ..... NJ
Hevi-Duty Electric Co. Div. Basic Products Corp. 3 ..... 304 Hart St, Watertown ..... Wis
Kinney Vacuum Div. The N. Y. Air Brake Co. 4 ..... 3650 Washington St, Boston 30 ..... Mass
L.J Products, 3 ..... 7664 Girard Ave, La Jolla ..... Cal
Lindberg Engineering Co. 1-2-3-4 ..... 2650 W Hubbard St, Chicago 12 Ill
NRC EQUIPMENT CORP. NATIONAL RESEARCH CORP. 1-3-4-5,
Adv Pg 238 ..... 69 Charlemont St, Newton Highlands 61 ..... Mass
National Research Corp. 4-5 ..... 70 Memorial Dr, Cambridge 42 ..... Mass
New York Air Brake Co ..... 230 Park Ave, New York 17 ..... NY
Nuclear Metals, Inc. 1-2-3-4 ..... Box 3020 Concord ..... Mass
Nabem, GmbH ..... Wolfgang bei Hanau/Main ..... Ger
Oregon Metallurgical Corp., 4 ..... Box 484, Albany ..... Ore
Orenda Engines Ltd. 5 ..... Box 4015 Term A, Toronto ..... Can
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. 2-3-4,
Adv Pg 187 ..... Eindhoven ..... Neth
Stauffer Chemical Co. 5 ..... 380 Madison Ave, New York 17 ..... NY
Stewart Engineering Co. 3 ..... 467 Bean Creek Rd, Santa Cruz ..... Cal
STOKES CORP., F. J. 3-4, Adv Pg 241 ..... 5500 Tabor Rd, Philadelphia 20 ..... Pa
Surface Combustion Div. Midland-Ross Corp. 3 ..... 2375 Dorr St, Toledo 1 ..... Ohio
SYLCOR DIV. SYLVANIA ELEC PRODS. INC. 1-2-3-4,
Adv Pg 38 ..... Castlegate Rank Rd, Hicksville ..... NY
Sylvania Elec Prods Inc. Chem & Met Div. 4 ..... Towanda ..... Pa
Thermal-Dynamics Corp. 1 ..... Lebanon ..... NH
UNITED NUCLEAR CORP. 4, Adv Pg 35 ..... 365 Winchester Ave, New Haven 4 ..... Conn
U. S. Controls, Inc. 5 ..... 410 Fourth Ave, Brooklyn 15 ..... NY
Vacuum Ind. Applications, Ltd., 4-5 ..... Nethercote Rd, Widnes, Lancashire ..... Scot
Vacuum Research (Cambridge) Ltd. 1-4 ..... Quayside, Bridge St, Cambridge ..... Eng
Vacuum Specialties Inc. 3-4 ..... 36 Linden St, Somerville 2 ..... Mass
Whiting Corp. 1 ..... 157 & Lathrop Sts, Harvey Ill

FURNACES—MICROCOMBUSTION

Gallenkamp & Co. Ltd., A. ..... Sun St, London, E. C. 2, England

FURNACES—SINTERING

A.E.I. Ltd. ..... 33 Grosvenor Pl, London SW1, Eng
Alloy Research & Mfg. Corp. ..... 34-32 57th St, Woodside 77 ..... NY
American Gas Furnace Co. ..... 140 Spring St, Elizabeth ..... NJ
Burrell Corp. ..... 2223 5th Ave, Pittsburgh 19 ..... Pa
General Electric Co. Ltd. of England ..... Erith, Kent, England
General Vacuum Corp. ..... 81 Hicks Ave, Medford ..... Mass
Grieve-Hendry Co. Inc. ..... 1380 N Elston Ave, Chicago 22 Ill
HARPER ELECTRIC FURNACE CORP.
Adv Pg 114 ..... 57 River St, Buffalo 2 ..... NY
Hevi-Duty Electric Co. Div. Basic Products Corp. ..... 304 Hart St, Watertown ..... Wis
Ipsen Industries, Inc. ..... Box 500, Rockford Ill
Kinney Vacuum Div. The N. Y. Air Brake Co. ..... 3650 Washington St, Boston 30 ..... Mass
L.J Products ..... 7664 Girard Ave, La Jolla ..... Cal
Lindberg Engineering Co. ..... 2650 W Hubbard St, Chicago 12 Ill
Liquid Metals, Inc. ..... Box 2666, Westford ..... Mass
Lydon Bros. Inc. ..... 85 Zabriskie St, Hackensack ..... NJ
NRC EQUIPMENT CORP. NATIONAL RESEARCH CORP.
Adv Pg 238 ..... 69 Charlemont St, Newton Highlands 61 ..... Mass
Nabem, GmbH ..... Wolfgang bei Hanau/Main ..... Ger
Rockwell Co., W. S. ..... 800 Eliot St, Fairfield ..... Conn
STOKES CORP., F. J. Adv Pg 241 ..... 5500 Tabor Rd, Philadelphia 20 ..... Pa
Surface Combustion Div. Midland-Ross Corp. ..... 2375 Dorr St, Toledo 1 ..... Ohio
SYLCOR DIV. SYLVANIA ELEC PRODS. INC.
Adv Pg 38 ..... Castlegate Rank Rd, Hicksville ..... NY
Sylvania Elec Prods Inc. Chem & Met Div. ..... Towanda ..... Pa
Vacuum Ind. Applications, Ltd. ..... Nethercote Rd, Widnes, Lancashire ..... Scotl
ZIRCONIUM CORP. OF AMERICA,
Adv Pg 226 ..... 21506-8 Solon Rd, Solon 39 ..... Ohio

FURNITURE—LABORATORY

See Also CONSOLES, CABINETS & PANELS
SINKS—LABORATORY

Browne-Morse Co. ..... 110 E Broadway, Muskegon ..... Mich
Cannon ..... Box 5066, Jacksonville 7 ..... Fla
CONTROLLED ATMOSPHERE ENCLOSURES mFG CO
Adv Pg 38 ..... Leonard Air Base, Marianna ..... Fla
Denslab Equipment Corp. ..... 819 Linwood St, Brooklyn 8 ..... NY
Gallenkamp & Co. Ltd., A. ..... Sun St, London, E. C. 2, England
Hamilton Mfg. Co. ..... Two River ..... Wis
Ipsen Industries Inc. ..... Box 500, Rockford Ill
Kewaunee Mfg. Co. ..... 3033 S Center St, Adrian ..... Mich
L.J Products ..... 7664 Girard Ave, La Jolla ..... Cal
Laboratory Furniture Co. Inc. ..... 630 Conroy St, Islandia ..... NY
Metalab Equipment Co. ..... 270 Daily Ave, Hicksville ..... NY
Norwood Steel Equipment Ltd ..... Howard Way, Harlow, Essex ..... Eng
SAINT-GOBAIN MULHOUSE, Adv Pg 229 ..... 13 Bd G. Clemenceau, Courbevoie, Seine ..... Fr
Surface Combustion Div. Midland-Ross Corp. ..... 2375 Dorr St, Toledo 1 ..... Ohio
SYLVANIA Elec Prods Inc. Chem & Met Div. ..... Towanda ..... Pa
Technical Service Corp. ..... 917-19 S Third, Louisville 3 ..... Ky
Warren Corp. ..... 2501 Brighton Rd, Pittsburgh 12 ..... Pa
ZIRCONIUM CORP. OF AMERICA,
Adv Pg 226 ..... 21506-8 Solon Rd, Solon 39 ..... Ohio

FUSES

A.E.I. Ltd. ..... 33 Grosvenor Pl, London SW1, Eng
Atomics International Div. NAA ..... Box 309, Canoga Park ..... Cal
Bussmann Mfg. Div. McGraw Edison Co. ..... University at Jefferson, St. Louis 7 ..... Mo
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ..... 1 River Rd, Schenectady 5 ..... NY
General Electric Co. Ltd. of England ..... Erith, Kent, England
Littelfuse, Inc. ..... 1865 Miner St, Des Plaines Ill
Wilcox & Co. Ltd., Edward ..... Shenston Rd, Wythenshawe, Man 22, Eng

GADOLINIUM

See METALS, ALLOYS & COMPOUNDS

GAGES

See Also CONTROLS
INDICATORS
METERS

GAGES—FLOW

See METERS—FLOW

GAGES—HUMIDITY

See Also CONTROLS—HUMIDITY

AEG, Adv Pg 113-A ..... Nestlinse, Frankfurt/Main, Germany
Abbron Supply Co. ..... 170-15 Jamaica Ave, Jamaica 32 ..... NY
American Instrument Co. Inc. ..... 8030 Georgia Ave, Silver Spring ..... Md
American-Standard Controls Div. ..... 5888 Trombly, Detroit 8 ..... Mich
Beckle Corp. Prior Instrument Div. ..... 1456 Taylor Ave, Baltimore 4 ..... Md
Bristol Co. ..... Box 1790 NBG, Waterbury 90 ..... Conn
Cambridge Instrument Co. Inc. ..... 480 Lexington Ave, New York 17 ..... NY
Cambridge Instrument Co., Ltd. ..... 13 Grosvenor Pl, London SW1, Eng
Carason ..... 17 Bd. de la Liberation, St. Denis, Seine ..... Fr
CONTROLLED ATMOSPHERE ENCLOSURES MFG CO
Adv Pg 38 ..... Leonard Air Base, Marianna ..... Fla
Dr. Vinz KG ..... 32 Braunschweig, Bonn ..... Ger
Dynisco Div. Amer. Brake Shoe Co. ..... 42 Carleton St, Cambridge 42 ..... Mass
FOXBORO CO. Adv Pg 108 ..... 38 Neponset Ave, Foxboro ..... Mass
Hickok Electrical Instrument Co. ..... 10601 Dupont Ave, Cleveland 8 ..... Ohio
Honeywell Controls, Ltd. ..... Vandenhoof Ave, Toronto, Ont Canada
Kahl Scientific Instrument Corp. ..... Box 1148, El Cajon ..... Cal
MSA Research Corp ..... Callery ..... Pa
Meteorology Research, Inc. ..... 3020 N Lake Ave, Altadena ..... Cal
MINN-HONEYWELL REG CO. MOD. PRODS GROUP,
Adv. Pgs. 126, 249 ..... Wayne & Windrim Aves, Phila. 44 ..... Pa
Negretti & Zambra (Canada) Ltd ..... 4 Bennfell Rd, Toronto 14 ..... Ont
Pacific Transducer Corp. ..... 11836 SW Pico Blvd, LA 64 ..... Cal
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 187 ..... Eindhoven ..... Neth
Science Associates, Inc. ..... 194 Nassau St, W, Princeton ..... NJ
Siemens & Halske AG ..... Rheinbrechtstr. 80, Karlsruhe ..... Ger
Economic Pressure Products Inc. ..... 166 White Plains Rd, Tarrytown ..... NY

GAGES—IONIZATION

See CHAMBERS—IONIZATION

GAGES—LIQUID-LEVEL

See INDICATORS—LIQUID-LEVEL

GAGES—PIRANI

See GAGES—PRESSURE

GAGES—PRESSURE

See Also CONTROLS—PRESSURE

AEG, Adv Pg 113-A ..... Nestlinse, Frankfurt/Main, Germany
Aircraft Porous Media, Inc. ..... Glen Cove ..... NY
American Instrument Co. Inc. ..... 8030 Georgia Ave, Silver Spring ..... Md
Appleby & Ireland, Ltd. ..... Mark Lane, Bessingrove, Hants ..... Eng
AGas Werke AG ..... Frankenstrasse 150, 4630/Bochum ..... Ger
AVIER, INC. Adv Pg 184 ..... 38-13 Northern Blvd, Woodside 77 ..... NY
BAILEY METER CO. Adv Pg 68 ..... 29801 Euclid Ave, Wickliffe ..... Ohio
Bailey Meter Co. Ltd. ..... 5610 St. Catherine St, W, Montreal, Que Can
Beckle Corp. Montrose Div. ..... South Montrose ..... Pa
Bristol Co. ..... Box 1790 NBG, Waterbury 90 ..... Conn
Bryan Aeroquipment Ltd. ..... Willow Ln, Mitcham, Surrey, England
Cambridge Instrument Co., Ltd. ..... 13 Grosvenor Pl, London SW1, Eng
Chesapeake Instrument Corp. ..... Shadyside ..... Md
Consolidated Electrodynamics Corp. ..... 201 Sierra Madre Villa, Pasadena ..... Cal
Crosby Valve & Gage Co. (Adams Valve) ..... 4043 Kendrick St, Wrentham ..... Mass
Denver Fire Clay Co. ..... Box 5616, Denver 17 ..... Colo
Devonco & Co., Ltd. ..... Great Dover St, London SE1, England
Dieta Co. Inc., Henry G. ..... 10-16 Astoria Blvd, Long Island City 5 ..... NY
Dynisco Div. Amer. Brake Shoe Co. ..... 42 Carleton St, Cambridge 42 ..... Mass
Eckardt AG, J. C. ..... Stuttgart, Hauptstr. 1 Cannstatt ..... Ger
Everitbed & Vignoles, Ltd. Acton Lane Wks. ..... Chiswick, London W4 ..... Eng
Fairchild Controls Corp ..... 225 Park Ave, Hicksville ..... NY
Fischer Electronics Ltd. ..... Fisher Rd, Wythenshawe, Manchester 22, England
Fischer & Porter Co. ..... 80 Warminster Rd, Warminster ..... Pa
Flow Corp. ..... 12 Carleton St, Cambridge 42 ..... Mass
FOXBORO CO. Adv Pg 108 ..... 38 Neponset Ave, Foxboro ..... Mass
General Controls Co. ..... 801 Allen Ave, Glendale 1 ..... Cal

GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Eng. Co. (Radcliffe) Ltd.	Bury Rd. Radcliffe, Lancs.	Eng
Hacker & Co. Inc., William J.	Box 666, West Caldwell	NJ
Hastings-Raydist, Inc.	Newcomb Ave, Hampton	Va
Hays Corp.	Michigan City 60	Ind
Hallcraft Gage Div. Amer. Chain & Cable Co. Inc.	889 Connecticut Ave. Bridgeport 2	Conn
Hickok Electrical Instrument Co.	10601 Dupont Ave. Cleveland 8	Ohio
Hoke, Inc.	1 Tenakill Pk. Cresskill	NJ
Honeywell Controls, Ltd.	Vandenhof Ave, Toronto, Ont Canada	
Johnson Service Co.	Milwaukee 1	Wis
Kimble Valve Co.	133 S Clinton St. Fort Wayne	Ind
Liquid Metals, Inc.	Box 2088, Wexford	Mass
Moth Instrument Co. Div. Cole Oil & Gas Corp.	3501 Howard St. Skokie	Ill
Marlan Instrument Co.	10180 Madison Ave. Cleveland 3	Ohio
Milton, Inc.	9800 S W Macadam Ave. Portland 19	Ore
MINN-HONEYWELL REG CO. INDL PRODS GROUP,		
Adv. Pgs. 136, 240	Wayne & Hedden Avas. Phila. 44	Pa
MRC EQUIPMENT CORP. NATIONAL RESEARCH CORP.		
Adv Pg 238	60 Charlemont St. Newton Highlands 61	Mass
National Research Corp	70 Memorial Dr. Cambridge 42	Mass
Nogrett & Zambra (Canada) Ltd	4 Bertcliff Rd. Toronto 14	Ont
New York Air Brake Co	230 Park Ave. New York 17	NY
Nostbeug Thermometer Co. Inc.	194 Livingston St. Brooklyn 1	NY
Pall Corp.	Glen Cove	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 187	Eindhoven	Neth
Photocon Research Products	421 N Altadena Dr. Pasadena	Cal
Process & Instruments Corp.	15 Stone Ave. Brooklyn 38	NY
Pye & Co., Ltd, W. G.	Tech St. Cambridge, England	
Republic Flow Meter Co.	2250 Diversey Pkwy. Chicago 47	Ill
Robertshaw-Fulton Controls Co. Pelton Sylphon Div.	Box 400, Knoxville 1	Tenn
Siemens & Halske AG	Rheinbrueckenstr. 50, Karlsruhe	Ger
Simmonds Precision Products Inc.	106 White Plains Rd. Tarrytown	NY
Southern Instruments, Ltd.	Frimley Rd. Camberley, Surrey	Eng
STOKES CORP., F. J. Adv Pg 241	5500 Tabor Rd. Philadelphia 20	Pa
Taylor Instrument Cos.	95 Ames St. Rochester 1	NY
Temperature Engineering Corp.	1000 Tempco Blvd. Riverton	NJ
Trans-Sonics, Inc.	Box 320, Lexington 73	Mass
Vacuum-Electronic Corp.	Terminal Dr. Plainview	NY
Vacuum Technology, Inc.	7933 Gloria Ave. Van Nuys	Cal
Wallace & Tiernan, Inc.	25 Main St. Belleville 9	NJ
Weisler Instruments Corp.	195 E Merrick Rd. Freeport	NY
WELCH SCIENTIFIC CO. Adv Pg 192	1515 Sedgwick St. Chicago 10	Ill

GAGES—STRAIN

Advanced Technology Lab.	397 Wisteria Rd. Mountain View	Cal
Atlantian Instrument Co. Inc.	8036 Georgia Ave. Silver Spring	Md
American-Standard Controls Div.	4800 Tireshill, Detroit 9	Mich
Armstrong Whitworth Equipment	Hucclecote, Gloucester	Eng
BLH Corp. Electronics & Instr. Div.	42 4th Ave. Waltham 54	Mass
Baldwin-Lima-Hamilton Corp.	Dept N 8, Philadelphia 42	Pa
Brunl & Kjaer	Lindo Alle 53, Naerum, Den	
Budd Co. Instruments Div.	Box 565, Phoenixville	Pa
Consolidated Electrodynamics Corp.	360 Sierra Madre Villa, Pasadena	Cal
Dynisco Div. Amer. Brake Shoe Co.	48 Carleton St. Cambridge 42	Mass
Fairchild Controls Corp	225 Park Ave. Hicksville	NY
HERRON CO. Adv Pg 180	38 Hagemont Ave. Paxtonn	Mass
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
Honeywell Controls, Ltd.	Vandenhof Ave. Toronto, Ont Canada	
LAMBDA INC. SUB. DYNALECTRON INC.		
Adv Pg 204	2444 W Wilson Ave. Chicago 25	Ill
Lenk & Northrup Ltd.	Broad St. Birmingham 15	Eng
HERATOOM, N. V., Adv Pg 113-F	Hoendstede 38, The Hague	Neth
Philips Electronic Instruments	750 S Fulton Ave, Mt. Vernon	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 187	Eindhoven	Neth
Southern Instruments, Ltd.	Frimley Rd. Camberley, Surrey	Eng
U. S. NUCLEAR CORP., Adv Pg 137	801 N Lake St. Box 2021, Burbank	Cal

GAGES—THICKNESS OR DENSITY, NONRADIOACTIVITY

A. E. I. Ltd.	32 Grosvenor Pl. London SW1, Eng	
American Instrument Co. Inc.	8030 Georgia Ave. Silver Spring	Md
Automation Products, Inc.	3030 Mar Ray St. Houston 24	Tex
Baldwin Industrial Controls	Dartford, Kent	Eng
Bausch & Lomb, Inc.	85082 Bausch St. Rochester 2	NY
Bently Scientific Co.	3011 7th St. Berkeley 10	Cal
BRANSON INSTRUMENTS, INC. Adv Pg 78	37 Brown House Rd. Stamford	Conn
Budd Co. Instruments Div.	Box 565, Phoenixville	Pa
Custom Scientific Instruments Inc.	241 Devon St. Kearny	NJ
Dawe Instruments Ltd.	Western Ave. Acton, London W3	Eng
Dynisco Inc. Control Systems Div.	4455 Mission St. La Jolla	Cal
Dice Co., J. W.	Englewood 43	NJ
Evershed & Vignoles, Ltd. Acton Lane Wks.	Chiswick, London W4	Eng
Falk & Co. Ltd., M.	Exeter House, Belgrave Avenue	Eng
Fielden Electronics Ltd.	Faraday St. Wythenshawe, Manchester 22, England	
Fischer & Porter Co.	29 Warminster Rd. Warminster	Pa
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
Industrial Nucleonics Corp.	650 Ackerman Rd. Columbus 2	Ohio
KAMAN NUCLEAR, Adv. Pgs. 190, 191	Garden of the Gods Rd. Colo Springs	Colo
Kiel & Harrison Ltd.	1855 Wellington St. Ottawa, Canada	
Nogrett & Zambra (Canada) Ltd	4 Bertcliff Rd. Toronto 14	Ont
HERATOOM, N. V., Adv Pg 113-F	Hoendstede 38, The Hague	Neth
NUCLEAR-CHICAGO CORP.		
Adv. Pgs. 34-37	345 E Howard Ave. Des Plaines	Ill
NUCLEONIC CORP. OF AMERICA,		
Adv Pg 202	196 Dugway St. Brooklyn 31	NY
RADIATION COUNTER LABS. INC.		
Adv. Pgs. 82, 83	5122 Grove St. Skokie	Ill
Radio Corp. of America Industrial Electronic Prods.	Front & Cooper Sts, Camden 2	NJ
Solus-Schall, Ltd.	Honeypot Ln. Stanmore, Middx	Eng
TRACERLAB, INC. Adv. Pgs. 134, 113-6	1601 Trapelo Rd. Waltham 54	Mass
Unit Process Assemblies	22-15 37th Ave. Woodside 77	NY
Vogue Instrument Corp.	1380 Linden Blvd. Brooklyn 8	NY

GAGES—THICKNESS OR DENSITY, RADIOACTIVITY

American Trubar Corp. Sub. EECO Electronics, Ltd.	36-01 30th St. Long Island City 6	NY
Atomics International Div. NAA	Box 309, Canoga Park	Cal
BELGONUCLEAIRE, Adv Pg 113-L	35 rue des Colonies, Brussels 1	Belg
Carwoth	17 Bd. de la Libération, St. Denis, Seine	Fr
Curtiss-Wright Corp. Princeton Div.	Box 134, Princeton	NJ
Dr. Vieth KG	20 Rosenhagenweg, Bonn	Ger
Dresser Research Div. Dresser Ind. Inc.	10700 Independence St. Tulsa	Okla
EECO ELECTRONICS LTD. AMERICAN TRADAIR CORP.		
Adv Pg 219	Southend-on-Sea, Essex	Eng
ELECTRONIC ASSOCIATES, LTD.		
Adv Pg 21	4616 Tonge St. Willowdale, Ont	Can
Equipment Atomico Brasilian Ltda.	Box 2304, Rio de Janeiro	Braz
FRANKLIN SYSTEMS, INC. Adv Pg 236	3734 Millhaven Rd. W Palm Beach	Fla
FRIESEKE & HOEPFNER GMBH.		
Adv Pg 113-N	Erlangen-Bruck	Ger
General Dynamics /Fort Worth	Box 748 Fort Worth 1	Tex
Hitachi, Ltd	1-4-chome Marunouchi, Chiyoda-ku, Tokyo	Jap
Industrial Nucleonics Corp.	650 Ackerman Rd. Columbus 2	Ohio
Instruments Inc.	Box 556, Tulsa	Okla
ISOTOPE DEVELOPMENTS LTD.		
Adv Pg 74	Bath Rd. Beaconsfield, Reading, Berks	Eng
KAMAN NUCLEAR, Adv. Pgs. 190, 191	Garden of the Gods Rd. Colo Springs	Colo
Knapp Mills, Inc.	23-15 Borden Ave. LIC 1	NY
Kobe Kogyo Corp.	1-5 Wakayama-Doti, Hyogo-ku, Kobe	Jap
Leb. Prof. Dr. E. Berthold	22 Calmbacherst. Wilhelm Schwarzwald	Ger
Lockheed Aircraft Corp. Georgia Div.	1501 Northside Dr. NW, Atlanta 18	Ga
Malmier Lab Inc	101 Mill Lane, Metuchen	NJ
METRIX, INC. Adv Pg 30	Box 223, Deerfield	Ill
HERATOOM, N. V., Adv Pg 113-F	Hoendstede 38, The Hague	Neth
NUCLEAR CORP OF AMERICA, INST & CON DIV.		
Adv Pg 94	2 Rickwood Pl, Danville	NJ
NUCLEAR ENTERPRISES LTD.		
Adv Pg 194	550 Berry St. Winnipeg 21	Man
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC)		
Adv. Pgs. 217, 219, 221	1000 Vermon St. Apollo	Pa
Nuclear Research Corp.	Southampton	Pa
NUCLEONIC CORP. OF AMERICA,		
Adv Pg 202	196 Dugway St. Brooklyn 31	NY
Olmsat Corp.	2236 Rogers St. Cincinnati 16	Ohio
Paramon Ltd.	5A Princes St. Hanover Sq. London W1	Eng
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	663 Merrick Rd. Lynbrook	NY
Radionics Inc.	Lafayette & Water Sts. Norristown	Pa
R. A. L. P.	38 Rue Cabrol Cite, Marseille, Seine	Fr
SELO	Via Tommaso 27, Milan	Ital
Sheffield Corp. Sub. Bendix Corp.	731 Springfield St. Dayton 3	Ohio
Telluometer, Inc.	1346 Connecticut Ave. NW, Wash 6	DC
TRACERLAB, INC. Adv. Pgs. 134, 113-6	1601 Trapelo Rd. Waltham 54	Mass
Unit Process Assemblies	22-15 37th Ave. Woodside 77	NY
Uranium Instruments Co.	Box 1191, Grand Junction	Colo
X-Ray Dept. General Electric Co.	4855 Electric Ave. Milwaukee	Wis

GAGES—VACUUM

See CONTROLS—VACUUM

GALVANOMETERS

AEG, Adv Pg 112-A	Hauptsitz, Frankfurt/Main, Germany	
Baldwin Industrial Controls	Dartford, Kent, England	
Biddle Co., James G.	1316 Arch St. Philadelphia 7	Pa
Cambridge Instrument Co. Inc.	430 Lexington Ave. New York 17	NY
Cambridge Instrument Co., Ltd.	13 Grosvenor Pl. London SW1, Eng	
CENTRAL SCIENTIFIC CO. Adv Pg 113	1700 Irving Park Rd. Chicago 13	Ill
Consolidated Electrodynamics Corp.	360 Sierra Madre Villa, Pasadena	Cal
GELMAN INSTRUMENT CO. Adv Pg 223	Box 1119-M, Chelsea	Mich
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
Honeywell Div. Minneapolis-Honeywell Reg. Co.	5200 E Evans Ave. Denver 22	Colo
Hickok Electrical Instrument Co.	10601 Dupont Ave. Cleveland 8	Ohio
Honeywell Controls, Ltd.	Vandenhof Ave, Toronto, Ont Canada	
Kin Tel Div Cohu Electronics Inc.	5725 Kearny Villa Rd. San Diego 12	Cal
Lenk & Northrup Co.	4000 Stanton Ave. Phila 44	Pa
MINN-HONEYWELL REG CO. INDL PRODS GROUP,		
Adv. Pgs. 136, 240	Wayne & Hedden Avas. Phila. 44	Pa
Nogrett & Zambra (Canada) Ltd	4 Bertcliff Rd. Toronto 14	Ont
HERATOOM, N. V., Adv Pg 113-F	Hoendstede 38, The Hague	Neth
Photron Instrument Co.	6836 Detroit Ave. Cleveland 2	Ohio
Sanborn Co.	175 Wyman St. Waltham 54	Mass
Shallcross Mfg. Co.	Selma	NC
Siemens & Halske AG	Rheinbrueckenstr. 50, Karlsruhe, Germany	
Simpson Electric Co. Div. Amer. Gage & Mach Co.	5200 W Kinzie St. Chicago 44	Ill
WELCH SCIENTIFIC CO. Adv Pg 192	1515 Sedgwick St. Chicago 10	Ill

GAMMA COUNTERS

See Under COUNTERS—RADIATION

GAMMA-RAY SOURCES

See SOURCES—RADIOACTIVE

GAS DRYERS

Air Control, Inc.	460 Nashoth Ave. Nashoth	Pa
Atlantic Research Corp.	Alexandria	Va
Kahn & Co. Inc.	Box 616, Hartford 1	Conn
New York Air Brake Co	230 Park Ave. New York 17	NY
S.E.R.A.L., Adv Pg 113-J	1091 chaussee d'Alsemberg, Brussels 18	Belg
Temperature Engineering Corp.	1000 Tempco Blvd. Riverton	NJ
Trinity Equipment Corp.	Box 1172, Cortland	NY

GAS PURIFIERS

Centco	Box 5884, Jacksonville 7	Fla
CAMBRIDGE FILTER CORP. Adv Pg 127	738 Erie Blvd. E, Box 1355, Syracuse 1	NY
Catalytic Combustion Corp.	4705 14th St. Detroit 8	Mich
Cochrane Corp.	3134 17th St. Philadelphia 32	Pa
CONTROLLED ATMOSPHERE ENCLOSURES MFG CO		
Adv Pg 38	Leonard Air Base, Marianna	Fla
DE MARIUS CORP., LOUIS, Adv Pg 129	3077 Main St. Buffalo 14	NY
Engelhard Industries, Inc.	113 Astor St. Newark 2	NJ
GELMAN INSTRUMENT CO. Adv Pg 223	Box 1119-M, Chelsea	Mich
Liquid Metals, Inc.	Box 2088, Wexford	Mass
Roy Co., Milton	1300 E Mermaid Ln. Phila 18	Pa
S.E.R.A.L., Adv Pg 113-J	1091 chaussee d'Alsemberg, Brussels 18	Belg

GASES—COUNTER

Erie Pacific Div. Erie Resistor	15900 S Weber Way, Hawthorne	Cal
Matheson Co.	875 Paterson Plank Rd. E Rutherford	NJ
NUCLEAR-CHICAGO CORP.,		
Adv. Pgs. 34-37	345 E Howard Ave. Des Plaines	Ill
Siemens-Reinigar-Werke AG	Luitpoldst. 46, Erlangen	Ger
TRACERLAB, INC. Adv. Pgs. 134, 113-6	1601 Trapelo Rd. Waltham 54	Mass

GASES

1. ARGON
2. CARBON DIOXIDE
3. HELIUM
4. HYDROGEN
5. NITROGEN
6. OXYGEN

Air Reduction Co. Inc. 1-2-4-5-6	150 E 42nd St. New York 17	NY
D. I. S. I. Nuclear Corp. 1-2-3	Via A. Boldoni 30, Milan	Ital
DE MARIUS CORP., LOUIS, 2-4-5		
Adv Pg 129	3077 Main St. Buffalo 14	NY
General Electric Co. Lamp Metals & Components Dept. 1-4-5-6	21800 Tungsten Rd. Cleveland 17	Ohio
LINDE CO. DIV. UCC, 1-3-4-5-6,		
Adv Pg 128	270 Park Ave. New York 17	NY
Linde Carbons Div. Gen. Dynamics Corp. 1-2-3-4-5-6	135 S La Salle St. Chicago 3	Ill
Mackey, Inc. A. D., 1-2-3-4-5-6	100 Broadway, New York 30	NY
Matheson Co., 1-2-3-4-5-6	875 Paterson Plank Rd. E Rutherford	NJ
HERATOOM, N. V., 1-3, Adv Pg 113-F	Hoendstede 38, The Hague	Neth
SHOWA DENKO K. K., 2-4-5-6,		
Adv Pg 113-G	24 Shiba Miyamoto-cho, Minato-ku, Tokyo	Jap

GASES—LIQUEFIED

Air Reduction Co. Inc.	150 E 42nd St. New York 17	NY
AMERICAN POTASH & CHEM. CORP.,		
Adv Pg 104	3000 W 6th St. Los Angeles 54	Cal
DE MARIUS CORP., LOUIS, Adv Pg 129	3077 Main St. Buffalo 14	NY
General Electric Co. Lamp Metals & Components Dept.	21800 Tungsten Rd. Cleveland 17	Ohio
LINDE CO. DIV. UCC, Adv Pg 128	270 Park Ave. New York 17	NY
Linde Carbons Div. Gen. Dynamics Corp.	135 S La Salle St. Chicago 3	Ill
Matheson Co.	875 Paterson Plank Rd. E Rutherford	NJ
Pennsalt Chemicals Corp.	3 Penn Center, Philadelphia 2	Pa
SHOWA DENKO K. K., Adv Pg 113-G	24 Shiba Miyamoto-cho, Minato-ku, Tokyo	Jap
Superior Air Products Co.	120 Midvale St. Newark 6	NJ

GAS-MONITORS, RADIOACTIVITY

See MONITORS—RADIATION

GASKETS

See Also O-RINGS
PACKINGS

ADVANCED PRODUCTS CO. Adv Pg 234	39 Broadway, North Haven	Conn

ALLIED ENGINEERING & PRODUCTION CORP.,
Adv Pg 242 ..... 2421 Blending Ave. Alameda ..... Cal
Armstrong Cork Co. ..... Lancaster ..... Pa
Auburn Mfg. Co. ..... 100 Stack St. Middletown ..... Conn
Baron Industries, Inc. ..... 198 Pleasant St. Watertown ..... Mass
Chicago Gasket Co. ..... 1271 W North Ave. Chicago 22 Ill
Continental-Diamond Fibre Corp. ..... Newark ..... Del
Felton Co., The ..... 1210 South St. Boston 11 ..... Mass
FLEXITALLIC GASKET CO. Adv Pg 79 ..... 8th & Bailey, Camden ..... NJ
John-Manville ..... 22 E 40th St. New York 16 ..... NY
Metallic Gasket Co. ..... 18 Bethany St. New Brunswick ..... NJ
Vacuum Research (Cambridge) Ltd. ..... Quayside, Bridge St. Cambridge ..... Eng

GAUSSMETERS

DYNA EMPIRE, INC. Adv Pg 197 ..... 1075 Denver Ave. Garden City ..... NY
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ..... 1 River Rd. Schenectady 5 ..... NY
RAWSON ELECTRICAL INSTRUMENT CO.
Adv Pg 66 ..... 134 Porter St. Cambridge 42 ..... Mass

GEARS

A.E.I. Ltd. ..... 30 Grosvenor Pl. London SW1, Eng
Beloit Instrument Corp. ..... 120-00 14th Ave. College Point 56 ..... NY
Bethlehem Steel Corp. ..... 701 E 2nd St. Bethlehem ..... Pa
Bowser Instrument Corp. ..... 9900 Buffton Rd. Fort Wayne ..... Ind
Continental-Diamond Fibre Corp. ..... Newark ..... Del
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ..... 1 River Rd. Schenectady 5 ..... NY
Harvey Electronics Ltd. ..... 272 Farnborough Rd. Farnborough Hants. ..... Eng
Link Div. - Gen. Precision, Inc. ..... Binghamton ..... NY
MERRANITE METAL CORP. Adv Pg 62 ..... 714 North Ave. New Rochelle ..... NY
Precision Mechanisms Corp. ..... 44 Brooklyn Ave. Westbury ..... NY
Reeves Instrument Corp. ..... 5 Cross Blvd. Garden City ..... NY
Research Development Manufacture, Inc. ..... 4519 E Collins St. Philadelphia 44 ..... Pa
Sassenberg-Gross-Fischer AG ..... Hammerstiegel Hagen, BR. Vienna 7 ..... Aus
Vogue Instrument Corp. ..... 2980 Linden Blvd. Brooklyn 8 ..... NY
Wiseman & Co. Ltd., Alfred ..... 59 Clover St. Birmingham 5 ..... Eng

GEIGER-MULLER TUBES

1. SELF-QUENCHING
2. THICK-WALL, GLASS
3. THICK-WALL, METAL
4. THIN-WALL
5. THIN-WINDOW

American Trebor Corp. Sub. EMCEE Electronics, Ltd. 1-2-3-4-5 ..... 36-01 10th St. Long Island City 6 ..... NY
AMPEREX ELECTRONIC CORP. 1-2-3-4-5,
Adv Pg 65 ..... 230 Duffy Ave. Hicksville ..... NY
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, 1-2-3-4-5,
Adv Pg 113-G ..... Charleroi ..... Belg
Atomacom-Beomine Corp. 1-2-3-4-5 ..... 111 W Jewel Ave. St. Louis 25 ..... Mo
ATOMIC ACCESSORIES, INC. 1-2-3-4-5,
Adv Pg 280 ..... 811 W Merrick Rd. Valley Stream ..... NY
Atomium Corp. 1-2-3-4-5 ..... 960 Main St. Waltham ..... Mass
B & K Labs. Ltd. 1 ..... 4 Tilney St. Park La. London W1 ..... Eng
Bell Telephone Mfg. Co. 1-2-3-4-5 ..... 20 Berkenrode, Hoboken/Antwerp ..... Belg
Beretrick Associates, Inc. 1-2-3-4-5 ..... 139 E 23rd St. New York 22 ..... NY
D.I.S.I. Nuclear Corp. 1-2-3-4-5 ..... Via A. Bordoni 20, Milan ..... Ital
Dr. Virus KG ..... 20 Rosenhugweg, Bonn ..... Ger
EM/US, 4-5, Adv Pg 49 ..... 1720 N Vine St. Hollywood 28 ..... Cal
ELECTRONIC ASSOCIATES, LTD. 1-2-3-4-5
Adv Pg 23 ..... 4216 Yonge St. Willowdale, Ont ..... Can
Fischbein, Morse & Co. 4 ..... 100 Electric Ln. Yonkers ..... NY
FORRO SCIENTIFIC CO. 1-5, Adv Pg 234 ..... 600 Lincoln St. Evanston Ill
FRIESSER & HOEFFNER GMBH, 1-2-3-4-5,
Adv Pg 113-H ..... Erlangen-Bruck ..... Ger
Instrumen Inc., 1 ..... Box 566, Tulsa ..... Okla
Intl Electronics S.p.A. 1-3-4-5 ..... Via Ignazio Pettinengo 75, Roma ..... Ital
JOHNSON & ASSOCIATES, INC. WILLIAM R., 4-5,
Adv Pg 226 ..... Box 418, Mountain Lakes ..... NJ
JOHNSTON LABS. INC., WILLIAM R., 3-4-5,
Adv Pg 198 ..... 2617 Woodland Ave. Baltimore 15 ..... Md
Kahl Scientific Instrument Corp. 1-5-4-5 ..... Box 1108, El Cajon ..... Cal
Keiko Keisgo Corp. 1-3-4-5 ..... 1-1 Wakiyama-Dori, Hyogo-Ku, Kobe ..... Jap
Lab Central de Telecommunications, 1-2-3-4-5 ..... 46 ave de Breteuil, Paris 8e ..... Fr
Lab. Prof. Dr. R. Berthold, 1-2-3-4-5 ..... 75 Calmbacherstr. Wildbad im Schwarzwald ..... Ger
LIONEL ELECTRONIC LABS. 1-2-3-4-5,
Adv Pg 218 ..... 1220 Flushing Ave. Brooklyn 37 ..... NY
MELLON, INC., GEORGE T. 1-2-3-4-5,
Adv Pg 182 ..... 122 Hanover St. New York 38 ..... NY
Milton Hewitt Ltd. 1-4-3-4-5 ..... Old Shoreham Rd. Shoreham-by-Sea, Sussex ..... Eng
MORATORIA, N. V., 1-2-3-4-5,
Adv Pg 113-F ..... Noordeinde 38, The Hague ..... Neth
NUCLEAR-CHICAGO CORP. 1-2-3-4-5,
Adv. Pgs. 34-37 ..... 340 E Howard Ave. Des Plaines Ill
Nuclear Development Lab. Inc. 1-3-4-5 ..... Box 7004, Kansas City ..... Mo
NUCLEAR ENTERPRISES LTD. 1-2-3-4-5,
Adv Pg 106 ..... 550 Berry St. Winnipeg 21 ..... Man
Nuclear Research Applications Ltd. 1-2-3-4-5 ..... Bell St. Reigate (Surrey) ..... Eng
NUCLEONIC CORP. OF AMERICA, 1-2-3-4-5,
Adv Pg 202 ..... 190 Degraw St. Brooklyn 31 ..... NY

Philips Electronic Instruments, 1-2-3-4-5 ..... 750 S Fulton Ave. Mt. Vernon ..... NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. 1-2-3-4-5,
Adv Pg 187 ..... Eindhoven ..... Neth
Picker X-Ray Corp. 1-4-5 ..... 25 S Broadway, White Plains ..... NY
Prestelin & Co. oHG 1-2-3-4-5 ..... Box 2705, Frankfurt/Main 1, Germany
RADIATION COUNTER LABS. INC. 1-2-3-4-5,
Adv. Pgs. 82, 83 ..... 5122 W Grove St. Skokie Ill
RADIATION EQUIP. & ACCESSORIES CORP. 1-2-3-4-5,
Adv. Pg. 3rd Cover ..... 663 Merrick Rd. Lynbrook ..... NY
RADIATION INSTRUMENT DEVELOPMENT LAB. 1-5,
Adv. Pgs. 216, 2386-D ..... 41 E North Ave. Northlake Ill
Radiochemistry, Inc. 5 ..... 1111 W St. Catherine St. Louisville 10 ..... Ky
Raytheon Co. Industrial Components Div. 1-2-4 ..... 55 Chapel St. Newton ..... Mass
Servo Nuclear Corp. 1-2-3-4-5 ..... 20-21 Astoria Blvd. Long Island City ..... NY
Siemens & Halske AG, 1-2-3-4-5 ..... Berlin/Munchen, 56, Karlstadt, Germany
Siemens-Reiniger-Werke AG, 1-2-3-4-5 ..... Leipziger, 45, Erlangen, Germany
TECHNICAL ASSOCIATES, 1-2-3-4-5,
Adv Pg 235 ..... 140 W Providencia Ave. Burbank ..... Cal
TERMINAL RADIO INTERNATIONAL LTD. 1-2-3-4-5,
Adv Pg 113-C ..... 240 W 17th St. New York 11 ..... NY
TOKYO SHIBAURA ELECTRIC CO. LTD. 1-2-3-4-5, Adv Pg 225 ..... 12 Tsuruo-cho 1-Chome, Chiyoda-ku, Tokyo ..... Jap
TRACERLAB, INC. 1-2-3-4-5,
Adv. Pgs. 136, 113-G ..... 1601 Trapelo Rd. Waltham 54 ..... Mass
20th Century Electronics Ltd. 1-2-3-4-5 ..... King Henry's Dr. New Addington Croydon, Surrey ..... Eng
U. S. RADIUM CORP. 1-2-3-4-5,
Adv Pg 186 ..... Box 246, Morristown ..... NJ
VICTOREEN INSTRUMENT CO. 1-4-5,
Adv. Pg. 4th Cover ..... 5806-11 Hough Ave. Cleveland 3 ..... Ohio

GENERATORS—NEUTRON

Aerojet-General Nucleonics ..... Box 77, San Ramon ..... Cal
AMPEREX ELECTRONIC CORP.,
Adv Pg 65 ..... 230 Duffy Ave. Hicksville ..... NY
Atomic Lab Sub. Cenco ..... 3088 Claremont Ave. Berkeley 5 ..... Cal
Atomics International Div. NAA ..... Box 309, Canoga Park ..... Cal
D.I.S.I. Nuclear Corp. ..... Via A. Bordoni 20, Milan ..... Ital
Dresser Research Div. Dresser Ind. Inc. ..... 10700 Independence St. Tulsa ..... Okla
Equipment Atomica Brasilia Ltda. ..... Box 2984, Rio de Janeiro ..... Braz
HIGH VOLTAGE ENGINEERING CORP.
Adv Pg 179 ..... 5 Bedford St. Burlington ..... Mass
Hitachi, Ltd ..... 1-4-chome Marunouchi, Chiyoda-ku, Tokyo ..... Jap
HUGHES AIRCRAFT CO. NUCLEONICS LAB.
Adv Pg 203 ..... Box 2097, Fullerton ..... Cal
KAMAN NUCLEAR, Adv. Pgs. 198, 191 ..... Garden of the Gods Rd. Colo Springs ..... Colo
Milton Hewitt Ltd ..... Old Shoreham Rd. Shoreham-by-Sea, Sussex ..... Eng
MORATORIA, N. V., Adv Pg 113-F ..... Noordeinde 38, The Hague ..... Neth
NUCLEAR-CHICAGO CORP.,
Adv. Pgs. 34-37 ..... 340 E Howard Ave. Des Plaines Ill
NUCLEAR ENTERPRISES LTD.,
Adv Pg 194 ..... 550 Berry St. Winnipeg 21 ..... Man
Pneumon Ltd. ..... 54 Princes St. Hanover Sq. London W1 ..... Eng
Philips Electronic Instruments ..... 750 S Fulton Ave. Mt. Vernon ..... NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 187 ..... Eindhoven ..... Neth
Picker X-Ray Corporation ..... 1879 Mamaroneck Ave. White Plains ..... NY
RADIATION COUNTER LABS. INC.
Adv. Pgs. 82, 83 ..... 5122 W Grove St. Skokie Ill
S.A.R.E.S., Adv Pg 224 ..... 25 rue Jean Goujon, Grenoble, Isere ..... Fr
Siemens Schuckertwerke AG ..... Werner-von-Siemens Str. 50, Erlangen ..... Ger
TOKYO SHIBAURA ELECTRIC CO. LTD. ..... 12 Tsuruo-cho 1-Chome, Chiyoda-ku, Tokyo ..... Jap
Adv Pg 225
20th Century Electronics Ltd. ..... King Henry's Dr. New Addington Croydon, Surrey ..... Eng
U. S. NUCLEAR CORP., Adv Pg 127 ..... 801 N Lake St. San Ramon ..... Cal

GENERATORS—PULSE

A.E.I. Ltd. ..... 30 Grosvenor Pl. London SW1, Eng
Aerojet-General Nucleonics ..... Box 77, San Ramon ..... Cal
American Electronic Labs. ..... Colmar ..... Pa
Amthong Ultrasonic Lab. Inc. ..... 91 Green St. Jamaica Plain 30 ..... Mass
Bendix Elecmon U.K. Ltd. ..... High Church St. New Basford, Nott. ..... Eng
Bico-Brown Eng. Corp. ..... Box 6444, Tucson ..... Ariz
Chesapeake Instrument Corp. ..... Shadyside ..... Md
COMMIT KAUFMAN LABS., INC.
Adv Pg 3rd Cover ..... 1645 Sherrick Hwy. Bellport ..... NY
Crosby-Telectronics Corp. ..... 56 Kinkel St. Westbury ..... NY
D.I.S.I. Nuclear Corp. ..... Via A. Bordoni 20, Milan ..... Ital
Dynatron-Radio Ltd. ..... St. Peter's Rd. Perse Place, Maidenhead, Berks. Eng
E-H Research Labs. Inc. ..... 103 Adeline St. Oakland 20 ..... Cal
EBERSTEIN, GERMANSHEIM & GARTE, INC.
Adv Pg 195 ..... 100 Hamilton Ave. Boston 12 ..... Mass
Elmo Instruments Inc. ..... 420 Buckley St. Bristol ..... Pa
Exact Electronics Inc. ..... Box 234, Hillsboro ..... Ore
General Nuclear Corp ..... 2202 S Cypress Ave. Fullerton ..... Cal
General Radio Co. ..... West Concord ..... Mass
HAMMER ELECTRONICS CO. Adv Pg 212 ..... Box 391, Princeton ..... NJ
Hewlett-Packard Co. ..... 1501 Page Mill Rd. Palo Alto ..... Cal
Hickok Electrical Instrument Co. ..... 10601 Dupont Ave. Cleveland 8 ..... Ohio
KAMAN NUCLEAR, Adv. Pgs. 198, 191 ..... Garden of the Gods Rd. Colo Springs ..... Colo
Kay Electric Co. ..... Maple Ave. Pine Brook ..... NJ
LAMBDA-ION INC. DIV. SYNALECTRON INC.
Adv Pg 204 ..... 7464 N Milwaukee Ave. Chicago 31 Ill

L'Electronique Appliquee ..... 25 rue de Docteur Finlay, Paris 15, Fr
Lockheed Aircraft Corp. ..... Box 551 Burbank ..... Cal
Lumatron Electronics, Inc. ..... 116 County Courthouse Rd. New Hyde Park ..... NY
Mannon Laboratories, Inc. ..... 275 Fairfield Ave. Stamford ..... Conn
Marshall of Cambridge Electronics Ltd. ..... The Aerodrome, Cambridge, England
Milton Hewitt Ltd ..... Old Shoreham Rd. Shoreham-by-Sea, Sussex ..... Eng
Nash & Harrison Ltd. ..... 1050 Wellington St. Ottawa, Canada
Navigation Computer Corp. ..... Valley Forge Ind Pk. Norristown ..... Pa
MORATORIA, N. V., Adv Pg 113-F ..... Noordeinde 38, The Hague ..... Neth
Nuclear Research Applications Ltd. ..... Bell St. Reigate, Surrey, England
Power Equipment, Ltd. ..... Hammersmiths Ind. Est. Bedford, Sust. Eng
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 187 ..... Eindhoven ..... Neth
Plasmonics Inc ..... Centre & Glendale Sts. Exeter ..... Pa
Polaroid Electronics Corp. ..... 49-20 30th St. Long Island City 1 ..... NY
RADIATION EQUIP. & ACCESSORIES CORP.
Adv. Pg. 3rd Cover ..... 663 Merrick Rd. Lynbrook ..... NY
Radiation Instrument Co. ..... Box 733, Silver Spring ..... Md
RADIATION INSTRUMENT DEVELOPMENT LAB.
Adv. Pgs. 216, 2386-D ..... 41 E North Ave. Northlake Ill
RADIATION TECHNOLOGY, INC.
Adv. Pg. 3rd Cover ..... 657 Auburn St. NW, Atlanta 18 ..... Ga
Rear Engineering, Inc. ..... A & Courtland, Philadelphia 20 ..... Pa
Sibet Desjardins ..... 13 rue Perier, Montrouge, Seine ..... Fr
Sutherland Electronics Co. ..... 6064 Lindblade, Culver City ..... Cal
SELO ..... Via Teodorio 57, Milan ..... Ital
Simpson Electric Co. Div. Amer. Gage & Mach Co. ..... 5200 W Kinzie St. Chicago 44 Ill
Special Instrument Laboratory, Inc. ..... 323 W Vine Ave. Knoxville 02 ..... Tenn
Specialty Electronics Devel. Corp. ..... 131-01 30th Ave. Flushing ..... NY
Spencer-Kennedy Labs. Inc. ..... 1320 Soldiers Field Rd. Boston 35 ..... Mass
Tapco Div. Thompson Ramo Wooldridge Inc. ..... 23555 Euclid Ave. Cleveland 17 ..... Ohio
Telemeti, Inc. ..... Box 500, Beaverton ..... Ore
VICTOREEN INSTRUMENT CO.,
Adv. Pg. 4th Cover ..... 5806-11 Hough Ave. Cleveland 3 ..... Ohio
Wang Laboratories ..... 18 Hunn Dr. Natick ..... Mass
Wayne Kerr Corp. ..... 1030 Race St. Philadelphia 3 ..... Pa

GENERATORS—STEAM

See STEAM GENERATORS—POWER-PLANT

GENERATORS—VAN DE GRAAFF

See ACCELERATORS

GLASS—HIGH-DENSITY

See SHIELDING—RADIATION

GLASSWARE—LABORATORY

See Also GLASS-WORKING APPARATUS

ALLIED ENGINEERING & PRODUCTION CORP.,
Adv Pg 242 ..... 2421 Blending Ave. Alameda ..... Cal
CENTRAL SCIENTIFIC CO. Adv Pg 112 ..... 1700 Irving Park Rd. Chicago 13 Ill
Corning Glass Works, Shielding Radiation ..... Corning ..... NY
HARDING POWER SPECIALTY CORP.
Adv Pg 7 ..... Box 415, Lancaster ..... Ohio
Dr. Virus KG ..... 20 Rosenhugweg, Bonn ..... Ger
Gallenkamp & Co. Ltd., A. ..... Sun St. London, E. C. 2, England
JENAER GLASWERKSCHOTT & GEN.,
Adv Pg 113-B ..... 20 Normannenstr. Mainz/Rhein ..... W Ger
Kahl Scientific Instrument Corp. ..... Box 1108, El Cajon ..... Cal
LABORATORY EQUIPMENT CORP. ..... St. Joseph ..... Mich
Nonburg Thermometer Co. Inc. ..... 134 Livingston St. Brooklyn 1 ..... NY
RADIATION COUNTER LABS. INC.
Adv. Pgs. 82, 83 ..... 5122 W Grove St. Skokie Ill
Radiochemistry, Inc ..... 1111 W St. Catherine St. Louisville 10 ..... Ky
Scientific Glass Apparatus Co., Inc. ..... 100 Lakewood Terr. Bloomfield ..... NJ
Thomas Co., Arthur H. ..... Vine St at 3rd, Philadelphia 5 ..... Pa
Wheaton Industries, Inc. ..... 1111 W Grove St. Skokie Ill
WELCH SCIENTIFIC CO. Adv Pg 192 ..... 1515 Sedgwick St. Chicago 10 Ill
Will Corp. ..... Box 1060, Rochester 3 ..... NY

GLASS-WORKING APPARATUS

American Gas Furnace Co. ..... 160 Spring St. Elizabeth ..... NJ
Associated Engrg. & Mfg. Corp. ..... 119 Stanhope Rd. Glen Ridge ..... NJ
Atomic Lab Sub. Cenco ..... 3088 Claremont Ave. Berkeley 5 ..... Cal
CENTRAL SCIENTIFIC CO. Adv Pg 112 ..... 1700 Irving Park Rd. Chicago 13 Ill
HARDING POWER SPECIALTY CORP.
Adv Pg 7 ..... Box 415, Lancaster ..... Ohio
FISH-SCHURMAN CORP. Adv Pg 234 ..... 70 Pacemar Rd. New Rochelle ..... NY
Glass Engineering Labs. ..... Box 940, Grass Valley ..... Cal
Nonburg Thermometer Co. Inc. ..... 134 Livingston St. Brooklyn 1 ..... NY
RADIATION COUNTER LABS. INC.
Adv. Pgs. 82, 83 ..... 5122 W Grove St. Skokie Ill
Scientific Glass Apparatus Co., Inc. ..... 100 Lakewood Terr. Bloomfield ..... NJ
Ulmer Co., H. W. ..... 1941 San Luis Rey Rd. Oceanside ..... Cal
Will Corp. ..... Box 1060, Rochester 3 ..... NY

GLOVE BOXES

See DRY BOXES

GLOVES—DRY BOX

Air Control, Inc.	460 Narberth Ave. Narberth	Pa
ALLIED ENGINEERING & PRODUCTION CORP., Adv Pg 242	2421 Blending Ave. Alameda	Cal
American Sterilizer Co.	Box 6790, Erie	Pa
BLICKMAN, INC., S., Adv Pg 180	7900 Gregory Ave. Weehawken	NJ
Bochler & Co.	Frankfurter Str. 294 Braunschweig, Ger	
Cantrco	Box 6404, Jacksonville 7	Fla
CHARLESTON RUBBER CO. Adv Pg 189	2 South Industrial Pk. Charleston	SC
CONTROLLED ATMOSPHERE ENCLOSURES MFG. CO Adv Pg 30	Leonard Air Base, Marianna	Fla
DEFENSE APPAREL, Adv Pg 250	110 Allyn St. Hartford 3	Conn
Erdtzer-Healy, Inc.	400 St. Paul St. Rochester 5	NY
General Scientific Equipment Co.	Limekiln & Williams, Philadelphia 50	Pa
Hamilton Mfg. Co.	Two Rivers	Wis
JOHNSON & ASSOCIATES, INC., WILLIAM S., Adv Pg 226	Box 415, Hammonton Lakes	NJ
KENAUBRE SCIENTIFIC EQUIPMENT, Adv Pg 116	4842 Logan St. Adrian	Mich
Kobe Kiggo Corp.	1-5 Nadayama-Dori, Hyogo-ku, Kobe	Jap
KRUEGER FABRICATING CO. INC., Adv Pg 222	Box 1284, Madison 1	Wis
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1000 Warren St. Apollo	Pa
Nonberg Thermometer Co. Inc.	104 Livingston St. Brooklyn 1	NY
Pioneer Rubber Co.	Tiffin Rd. Willard	Ohio
RADIATION COUNTER LABS. INC. Adv. Pgs. 82, 83	5122 W Grove St. Skokie	Ill
ROYAL RESEARCH CORP. Adv Pg 21	11024 Dublin Blvd. Hayward	Cal
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Rd G. Clemenceau, Courbevoie, Seine	Fr
Snyder Mfg. Co. Inc.	Box 404, New Philadelphia	Ohio
Sunny Rubber Co.	N High St. Carrollton	Ohio
UNITED NUCLEAR CORP., Adv Pg 38	205 Westmoreland Ave. New Haven 4	Conn
Wilson Rubber Co. Industrial Div.	Canton 6	Ohio

GLOW-TRANSFER COUNTING TUBES

See SCALING TUBES—DECADE

GRAPHITE

1. BULK
2. IMPREGNATED
3. PYROLYTIC
4. SPECIAL SHAPES

American Metal Products Co. 1-2-3-4	6000 Lindale Ave. Detroit 4	Mich
General Astrometals Corp. 1-2-3-4	200 Tuckahoe Ave. Yonkers 2	NY
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. 1,2,3,4, Adv Pg 202	Box 608, San Diego 12	Cal
General Electric Co. Metallurgical Prods. Dept. 3	11177 E 8 Mile Rd. Detroit 32	Mich
GREAT LAKES CARBON CORP. 1,2,4, Adv Pg 101	18 E 48th St. New York	NY
LANGSFORD ELECTROMETER CO. Adv Pg 230	645 Sonora Ave. Glendale 1	Cal
Mackay, Inc. A. D., 1-4	180 Broadway, New York 38	NY
NATIONAL CARBON CO. DIV. OF UCC, 1,2,3,4, Adv. Pgs. 96, 97	270 Park Ave. New York 17	NY
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), 2,3,4, Adv. Pgs. 217, 219, 221	1000 Warren St. Apollo	Pa
Oxcide Engines Ltd. 3	Box 4016 Term A, Toronto	Ont
PECHINEY, 1-2-3-4, Adv Pg 199	23 Rue Balzac, Paris, Seine	Fr
Raytheon Co. Research Div. High Temp. Materials Dept. 3	Waltham 54	Mass
Savoie-Ashman, Cie Industrielle, 1-2-3-4	10 rue de General Foy, Paris 8e	Fr
Semi-Alloys Inc., 4	20 N Macquesten Pkwy, Mt. Vernon	NY
SHOWA DENKO K. K., Adv Pg 113-B	24 Shiba Miyamoto-cho, Minato-ku, Tokyo	Jap
Sigri-Kohlefabrikum GmbH, 1-2-3-4	Meitinger ober Augsburg	Ger
Speer Carbon Co., 1-2-4	Thorese St., St. Marys	Pa
Stackpole Carbon Co., 2-4	St. Marys	Pa

HAFNIUM

See METALS, ALLOYS & COMPOUNDS

HAND & FOOT MONITORS—RADIOACTIVITY

See MONITORS—RADIATION

HANDLING EQUIPMENT

See CRANES
MANIPULATORS
MATERIALS-HANDLING EQUIPMENT
REFUELING EQUIPMENT—REACTOR
TONGS

HARDNESS TESTERS

Epic, Inc.	150 Nassau St. New York 38	NY
Gordon Co., Claud S.	615 W 30 St. Chicago 16	Ill
Sheffield Corp. Sub. Bendix Corp.	721 Springfield St. Dayton 1	Ohio
Soiss-Schell, Ltd.	Honeypot La. Summers, Middx	Eng
Wilson Mech. Instrument Div. Acme Chain & Cable Co. Inc.	230 Park Ave. New York 17	NY

HEALTH PHYSICS ORGANIZATION & PROCEDURES

See SERV. & CONS'LT: HEALTH PHYSICS ORGANIZATION & PROCEDURES

HEAT EXCHANGERS

1. GAS-TO-AIR
2. GAS-TO-STEAM
3. LIQUID-TO-AIR
4. LIQUID-TO-LIQUID
5. LIQUID-TO-STEAM
6. LIQUID-METAL-TO-GAS
7. LIQUID-METAL-TO-LIQUID-METAL
8. LIQUID-METAL-TO-STEAM
9. ORGANIC-TO-STEAM
10. ORGANIC-TO-GAS
11. GAS-TO-LIQUID

Adams Co. Inc., R. P. 1-2-3-4-5-6-7-8-9-10-11	475 E. Park Dr. Buffalo 17	NY
Advanced Technology Labs. 1-2-3-4-5-10-11	395 Whisman Rd. Mountain View	Cal
Alco Products, Inc. 1-2-3-4-5-6-7-8-9-10-11	Box 2063, Schenectady 5	NY
Alsthom, Nuclear Div. 1-2-3-4-5	38, Ave. Kleber, Paris 16, France	
American Metal Products Co. 1-2-3-4-5-6-7-8-9-10-11	6000 Lindale Ave. Detroit 4	Mich
American-Standard Industrial Div. 1-2-3-4-5-6-7-8-9-10-11	Detroit 32	Mich
American-Standard Prod. (Can) Ltd. 1-2-3-4-5-6-7-8-9-10-11	1201 Dupont St. Toronto 4, Ont.	Can
Aqua-Chem, Inc. 4-5	2555 N Grand Ave. Waukesha	Wis
BABCOCK & WILCOX CO. 1-2-3-4-5-6-7-8-11, Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Babcock & Wilcox Ltd. 1-2-3-4-5-7-8-9-10-11	209 Queen Rd. London SW 1	Eng
Barber, Greene & Tuscma, Anc. Ets. 2-4-5	84 rue Cortal, Paris 15e	Fr
Bethlehem Steel Corp. 4-5	701 E 3rd St. Bethlehem	Pa
Blank, Sivalls & Bryson, Inc. 1	7500 E 12 St. Kansas City 26	Mo
Carrier Air Conditioning Co. 3-4	Carrier Pkwy. Syracuse 1	NY
Clarkson & Co. Armac, Ltd. 1-2-3-4-5	54 Victoria St. London SW 1, England	
Cochrane Corp. 4-9	3514 17th St. Philadelphia 32	Pa
Combustion Engineering, Inc. 1-2-3-4-5-6-7-8-9-10	900 Madison Ave. New York 16	NY
Commerce et les Fabrications Industrielles S. A. 1-2-3-4-5-6-7-8-9-10-11	607 Ave de Schaerbeek Haren, Brussels 13	Belg
Condenser Service & Engrg. Co. Inc. 2-4-5-11	150 Chauvet Hwy. Hoboken	NJ
CRAWFORD FITTING CO. Adv Pg 58	884 E 140 St. Cleveland 10	Ohio
Croll-Reynolds Engineering Co. 4-5	1122 Main St. Stamford	Conn
Dashman-Bush, Inc. 1-3	170 South St. West Hartford 10	Conn
Dynatech Corp. 1-2-3-4-5-6-7-8-9-10-11	629 Massachusetts Ave. Cambridge 39	Mass
Engineers & Fabricators, 2-4-5-9-10-11	3501 W 11th St. Houston 8	Tex
Esther Wyss Ltd. 1-2-3-4-5	Zurich	Swit
Fansteel Metallurgical Corp. 4-5	North Chicago	Ill
FOSTER WHEELER CORP. 1-2-3-4-5-6-7-8-9-10-11, Adv Pg 120	666 5th Ave. New York 19	NY
Fraser & Co. Ltd., W. J. 1-2-3-4-5-7-8-9-10	Nascot Hill, Rossford, Essex, England	
Garrett Corp. 1-2-3-4-5-6-7-8-9-10-11	9851 Sepulveda Blvd. Los Angeles 45	Cal
Graham Mfg. Co. Inc. 1-2-3-4-5-6-7-8-9-10	170 Great Neck Rd. Great Neck	NY
Griscom-Russell Co. 1-2-3-4-5-6-7-8-11	Massillon	Ohio
Gutehoffnungshütte Vertriebs AG 1-2-3-4-5-8-10-11	Lippestrasse 1, Oberhausen Rhld.	Ger
Heat-X, Inc. 2-3-4-11	Brewster	NY
Hexacon, Inc. 1-2-3-4-5	Box 54, York	Pa
Hitachi, Ltd. 4-5	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
Hussey Steel Works, Ltd. 4-5	55 Adelaide St. W. Toronto	Ont
Johnson Corp. 5	859 Wood St. Three Rivers	Mich
Lummus Co. 1-2-3-4-5-6-7-8-9-10-11	1211 Avenue of the Americas, New York 36	NY
Lunder Boiler & Engineering Corp. 5	3201 S Wabash Ave. Chicago 6	Ill
Liquid Metals, Inc. 6-7-8	Box 3000, Wayland	Mass
Maryland Shipbuilding & Drydock Co. 1-2-3-4-5-11	Box 837, Baltimore 3	Md
MIDWEST PIPING DIV. CRANE CO. 1-2-3-4-5-11, Adv Pg 103	1400 S Second St. St. Louis 4	Mo
Modine Mfg. Co. 1-2-3-4-11	1460 DeKoven Ave. Racine	Wis
NATIONAL CARBON CO. DIV. OF UCC, 1-2-3-5-9-10-11, Adv. Pgs. 96, 97	270 Park Ave. New York 17	NY
NERATOM, N. V., 1-2-3-4-5-9-10-11, Adv Pg 112-F	Raamlaanlo 30, The Hague	Neth
Nooter Corp. 1-2-3-4-5-6-7-8-9-10-11	1404 S 3rd St. St. Louis 60	Mo
Northern Research & Eng. Corp. 1-2-3-4-5-6-7-8-9-10-11	230 Main St. Cambridge	Mass
Paramount Foundry & Machine Co. 1-2-4-5	East Liverpool	Ohio
Pfaudler Co. Div. Pfaudler Permutit Inc. 1-2-3-4-5-8-10	1000 West Ave. Rochester 3	NY
Robertshaw-Fulton Controls Co. Fulton Sylphon Div. 4-5	Box 400, Knoxville 1	Tenn
RUHRSTAHL, AG, 1-2-3, Adv Pg 112-E	Saarbaner Str. 38, Essen-Annen	Ger
Simmering-Graz-Pauker AG, 1-2-3-4-5	Simmeringer Hauptr. 95, Vienna 7	Aus
Smith Corp., A. O., Atomic & Process Equip. Div. 1-2-3-4-5-9-10	3533 N 27 St. Milwaukee 1	Wis
Societe Pierr-Pauker, 1-2-3-4-5-6-7-8-9-10-11	107 Rue Saint-Honore, Paris 1	Fr
Southwestern Engineering Co. 1-2-3-4-5-6-7-8-9-10-11	4500 Santa Fe Ave. Los Angeles 58	Cal
Standard-Thomson Corp., 1-2-3-4-5-6-7-8-9-10-11	180 Grove St. Waltham 54	Mass
Sulzer Bros. Ltd. 1-2-3-4-5-11	Winterthur	Swit
Thermal Dynamics Corp. 4	Lebanon	NH
Tosi, S.p.A., Franco, 1-2	Legnano, Milan	Ital
Tube Reducing Corp. 1-2-3-4-5-9-10-11	1020 Main Ave. Wallington	NJ
Vacuum Research (Cambridge) Ltd. 1-3-4-11	Quarry, Bridge St. Cambridge	Eng
Vernes pour le Traitement des Eaux, S A 1-2-3-4-5-11	1 Quai des Vennes, Liege	Belg
Vilter Mfg. Co. 3-4	2217 S First St. Milwaukee 7	Wis
Vogt Machine Co., Henry, 4	1000 W Ormsby St. Louisville	Ky
WESTINGHOUSE ELEC. CORP. STEAM DIV. 1-2-3-4-5-6-7-8-9-10-11, Adv. Pgs. 70, 71	Lester	Pa
Wheeler Mfg. Co. C. H. 3-4-7	1850 Sedgley Ave. Philadelphia 32	Pa
Whiting Corp. 4-5	157 & Lathrop Sts. Harvey	Ill
Whitlock Mfg. Co. 1-2-3-4-5-9-10-11	97 South St. West Hartford 10	Conn
Yuh Corp. 1-2-3-4-11	Gantlay Rd. Yuh	Pa
Young Radiator Co. 1-2-3-4-5	700 S Marquette St. Racine	Wis

HEATERS—ELECTRIC

AEG, Adv Pg 113-A	Hochstrasse, Frankfurt/Main, Germany	
A.E.I. Ltd.	30 Grosvenor Pl. London SW1, Eng	
Acme Electric Heating Corp.	90 Reading St. Roxbury 19	Mass
Alsthom, Nuclear Div.	38, Ave. Kleber, Paris 16, France	
AMPEREX ELECTRONIC CORP., Adv Pg 63	230 Duffy Ave. Hicksville	NY
Cole Electric Co.	9420 Mueller St. Culver City	Cal
Corning Glass Works, Shielding Radiation	Corning	NY
Cox & Co. Inc.	116 E 23rd St. New York 10	NY
Cutler-Hammer, Inc.	432 N 12th St. Milwaukee 1	Wis
Dynatech Corp.	629 Massachusetts Ave. Cambridge 39	Mass
Electric Arc, Inc.	150 Jolliff Ave. Newark 8	NJ
Garrett Corp.	9851 Sepulveda Blvd. Los Angeles 45	Cal
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Electric Co. Industrial Heating Dept.	1 Progress Rd. Shelbyville	Ind
Grieve-Hendry Co. Inc.	1300 N Elston Ave. Chicago 22	Ill
Hun-X, Inc.	Brewster	NY
Hitachi, Ltd.	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
Ilg Electric Ventilating Co.	2850 N Pulaski Rd. Chicago 41	Ill
Industrial Engineering & Equipment Co.	56 Healey Industrial Ct. St Louis (Beaumont) 17	Mo
Liquid Metals, Inc.	Box 3000, Wayland	Mass
Misco Products, Inc.	340 Washington Ave. N. Maple 1	Minn
Modern Lab. Equipment Co., Inc.	1021 1st Ave. New York 22	NY
NERATOM, N. V., Adv Pg 112-F	Raamlaanlo 30, The Hague	Neth
Research Inc.	Box 6126, Edina Sta. Maple 24	Minn
Schoco Scientific Div. Schenker & Co.	75 Cliff St. New York 38	NY
Sciaky Bros. Inc.	4915 W 47th St. Chicago 30	Ill
Sodern S. A.	10 rue de la Passerelle, Suresnes, Seine	Fr
Texas Engineering Co., Ltd.	North End Rd. Wembley, Middx. Eng.	
Vulcan Electric Co.	88 Holton St. Danvers	Mass
Wingard Co., Edwin L.	7000 Thomas Blvd. Pittsburgh 5	Pa
Will Corp.	Box 1000, Rochester 3	NY

HEATERS—FEED-WATER

Adams Co. Inc., R. P.	475 E. Park Dr. Buffalo 17	NY
Alco Products, Inc.	Box 1086, Schenectady 5	NY
Alsthom, Nuclear Div.	38, Ave. Kleber, Paris 16, France	
American-Standard Industrial Div.	Detroit 32	Mich
Bethlehem Steel Corp.	701 E 3rd St. Bethlehem	Pa
Cochrane Corp.	3514 17th St. Philadelphia 32	Pa
Commerce et les Fabrications Industrielles S. A.	607 Ave de Schaerbeek Haren, Brussels 13	Belg
Condenser Service & Engrg. Co. Inc.	150 Chauvet Hwy. Hoboken	NJ
Croll-Reynolds Engineering Co.	1122 Main St. Stamford	Conn
Dynatech Corp.	629 Massachusetts Ave. Cambridge 39	Mass
FOSTER WHEELER CORP. Adv Pg 120	666 5th Ave. New York 19	NY
Graver Water Conditioning Co.	216 W 14 St. New York 11	NY
Griscom-Russell Co.	Massillon	Ohio
Hesston Steel Works, Ltd.	55 Adelaide St. W. Toronto	Ont
Johnson Corp.	859 Wood St. Three Rivers	Mich
Maryland Shipbuilding & Drydock Co.	Box 837, Baltimore 3	Md
NERATOM, N. V., Adv Pg 112-F	Raamlaanlo 30, The Hague	Neth
Simmering-Graz-Pauker AG	Simmeringer Hauptr. 95, Vienna 7	Aus
Smith Corp., A. O., Atomic & Process Equip. Div.	3533 N 27 St. Milwaukee 1	Wis
Societe Pierr-Pauker	107 Rue Saint-Honore, Paris 1, France	
Southwestern Engineering Co.	4500 Santa Fe Ave. Los Angeles 58	Cal
Vulcan Electric Co.	88 Holton St. Danvers	Mass
WESTINGHOUSE ELEC. CORP. STEAM DIV. Adv. Pgs. 70, 71	Lester	Pa
Whitlock Mfg. Co.	97 South St. W Hartford	Conn

HEATERS—IMMERSION

AEG, Adv Pg 113-A	Hochstrasse, Frankfurt/Main, Germany	
A.E.I. Ltd.	30 Grosvenor Pl. London SW1, Eng	
Acme Electric Heating Corp.	90 Reading St. Roxbury 19	Mass
Adams Co. Inc., R. P.	475 E. Park Dr. Buffalo 17	NY
American Instrument Co. Inc.	8030 Georgia Ave. Silver Spring	Md
Corning Glass Works, Shielding Radiation	Corning	NY
Cutler-Hammer, Inc.	432 N 12th St. Milwaukee 1	Wis
Dynatech Corp.	629 Massachusetts Ave. Cambridge 39	Mass
Fansteel Metallurgical Corp.	North Chicago	Ill
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY

General Electric Co. Industrial Heating Dept.	1 Progress Rd. Shelbyville	Ind
Industrial Engineering & Equipment Co.	24 Healey Industrial Ct. St. Louis (Brentwood) 17	Mo
Modern Lab. Equipment Co., Inc.	102 1st Ave, New York 10	NY
PYRO-ELECTRIC, INC. Adv Pg 7	Rushin Rd. Valparaiso	Ind
Tonn Engineering Co., Ltd.	North End Rd, Wembley, Middx, Eng.	
THERMAL AMERICAN FUSED QUARTZ CO INC. Adv Pg 110	18-20 Salem St. Dover	NJ
Tube Reducing Corp.	520 Main Ave. Wallington	NJ
Volcan Electric Co.	88 Holmes St. Danvers	Mass
Wingard Co., Edwin L.	7500 Thomas Blvd, Pittsburgh 8	Pa

HEATERS—INDUCTION

AEG, Adv Pg 113-A	Hauptsitz, Frankfurt/Main, Germany	
A.E.I. Ltd.	20 Grosvenor Pl, London SW1, Eng	
Acme Electric Heating Corp.	30 Reading St. Roxbury 19	Mass
ALLIS-CHALMERS MFG. CO. Adv. Pgs. 109-111	900 S 70th St. Milwaukee	Wis
Canadian Westinghouse Co. Ltd.	Box 510, Hamilton, Ontario, Canada	
Cutler-Hammer, Inc.	432 N 12th St, Milwaukee 1	Wis
Dalapena & Son Ltd.	Tewkesbury Rd. Cheltenham, Glouc. Eng	
Dynatech Corp.	629 Massachusetts Ave, Cambridge 39	Mass
Electric Arc, Inc.	188 Jelliff Ave, Newark 8	NJ
GENERAL ELECTRIC CO. APPARATUS SALES. Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Electric Co. Ltd. of England	Erith, Kent, England	
General Electrodynamics Corp.	4400 Forest Ln. Garland	Tex
HERATOM, N. V., Adv Pg 113-F	Hoofdstraat 38, The Hague	Neth
Standard Tel. & Cables Ltd.	20 Glasshouse Yd. London EC 1	Eng
Ulmer Co., H. W.	2941 San Luis Rey Rd, Oceanside	Cal
U. S. Controls, Inc	420 Fourth Ave, Brooklyn 15	NY

HEATERS—INFRARED

AEG, Adv Pg 113-A	Hauptsitz, Frankfurt/Main, Germany	
A.E.I. Ltd.	20 Grosvenor Pl, London SW1, Eng	
Dynatech Corp.	629 Massachusetts Ave, Cambridge 39	Mass
HERATOM, N. V., Adv Pg 113-F	Hoofdstraat 38, The Hague	Neth
Research Inc.	Box 6104, Edina Sta, Minpls 24	Minn
Tonn Engineering Co., Ltd.	North End Rd, Wembley, Middx, Eng.	
Volcan Electric Co.	88 Holmes St, Danvers	Mass
Wingard Co., Edwin L.	7500 Thomas Blvd, Pittsburgh 8	Pa

HEATERS—MICRO

See MICROCHEMICAL EQUIPMENT

HEAT TRANSFER—TESTS & ANALYSIS

See SERV. & CONS'LT: HEAT TRANSFER—TEST & ANALYSIS

HEAVY WATER

See WATER—HEAVY

HELIUM

See Under GASES

HOODS—EXHAUST

See FUME HOODS

HOSE

See Also PIPING & TUBING
1. METAL, FLEXIBLE
2. PLASTIC
3. RUBBER

Aeroquip Corp. 2-3	300 S East Ave, Jackson	Mich
Aeroquip-Marman Div. 1-3	12324 W Exposition Blvd, L A 66	Cal
ALLIED ENGINEERING & PRODUCTION CORP. 1. Adv Pg 242	3421 Blending Ave. Alameda	Cal
Allied Flexible Supply Corp. 3	76 Cliff St, New York 38	NY
Allied Seamless Products, Inc. 3	Whitney Rd, & Clark St. Conneaut	Ohio
AMERICAN SMELTING & REFINING CO. 1. Adv Pg 67	120 Broadway, New York 5	NY
Avica Corp. 1	Box 188, Newport	NI
BTR Industries Ltd. 1-3-2	Vincent St, London, SW1	Eng
Breeze Corps, Inc. 1	700 Liberty Ave. Union	NJ
Bridgeport Brass Co. 1	30 Grand St. Bridgeport 2	Conn
Compagnie et les Establissements Industriaux S. A. 1	607 Ave de Schaerbeek-Haren, Brussels 13	Belg
Connecticut Rubber & Plastics Co. Div. U. S. Rubber Co. 1	Box 821, Conneaut	Ohio
Flexonics Co. 1-3	100 Park Ave. New York 17	NY
Flexonics Corp. 1	1315 S 3rd Ave. Maywood	Ill
General Electric Co. Lamp Metals & Components Dept. 3	21800 Tungsten Rd. Cleveland 17	Ohio
General Scientific Equip. Co.	Limestone & Williams, Phila 50	Pa
Hallett Mfg. Co. 1	5716 Bowcroft St, Los Angeles 16	Cal
Imperial-Eastman Corp. 2-3	6900 W Howard St, Chicago 48	Ill
Polytone Corp. 2	2150 Fairmont Ave. Reading	Pa
Polymers Ltd. 2	Tewin Rd. Welwyn Garden City, Herts.	Eng
Resistoflex Corp. 2	Woodland Rd, Roseland	NJ
Revere Copper & Brass Inc., 1	230 Park Ave, New York 17	NY
Shankles & Co., W. E. 2-3	13617 Jefferson Blvd, Culver City	Cal
Sheldon & Co. Inc., M. L. 2-3	360 Lexington Ave, New York 10	NY
Silvertown Rubber Co., Ltd., 1-2-3	Vincent St, London SW 1	Eng
Sparks Mfg. Co. Div., US Ceramic Tile Co., 3	Dover	Ohio
Standard-Thomson Corp., 1	152 Grove St, Waltham 54	Mass
United Flexible Metallic Tubing (Canada) Ltd. 1	Box 180, Richmond Hill, Ont Canada	
Will Corp. 2-3	Box 1886, Rochester 3	NY

HOT LABORATORIES—NUCLEAR

See Also SERV. & CONS'LT: HOT LABORATORY

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
Aerojet Div Aerojet-General Corp	4418 N Citrus Ave, Covina	Cal
ALLIED ENGINEERING & PRODUCTION CORP. Adv Pg 242	3421 Blending Ave. Alameda	Cal
AMERAY CORP., Adv Pg 113	Route 46, Kenvil	NJ
AMERICAN NUCLEAR CORP. Adv Pg 198	Box 438, Oak Ridge	Tenn
Atomics International Div. NAA	Box 309, Canoga Park	Cal
Atomscientic Consul Engrs. Ltd.	Bexley Pl, Seagrave Rd, London SW6	Eng
Bausch & Lomb, Inc.	55002 Bausch St. Rochester 2	NY
Belge de Chimie Nucleaire, Sta.	35 rue des Colonies, Brussels	Belg
BLICKMAN, INC., S. Adv Pg 109	7988 Gregory Ave. Weehawken	NJ
Burns & Roe, Inc.	100 W Broadway, New York 13	NY
CONTROLLED ATMOSPHERE ENCLOSURES MFG CO Adv Pg 88	Lemoore Air Base, Hanford	Fla
D. I. S. I. Nuclear Corp.	Via A. Bordoni 30, Milan	Ital
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. Adv Pg 280	Box 608, San Diego 12	Cal
GENERAL ELECTRIC CO. APPARATUS SALES. Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
Knapp Construction Co., Andrew	23-15 Borden Ave. Long Island City 1	NY
Knapp Mills, Inc.	23-15 Borden Ave. LIC 1	NY
L & S Machine Co, Inc.	Box 317, E. D. S, Lansdale	Pa
Lindy Boiler & Engineering Corp.	2001 S Wolcott Ave, Chicago 8	Ill
Lockheed Aircraft Corp.	Box 551, Burbank	Cal
Metzler Lein Inc	191 Mill Lane, Mountainside	NJ
Nuclegard Corp.	16555 Saticoy St, Van Nuys	Cal
Pennwrex Ltd.	58 Princes St, Hanover Sq, London W1, Eng	
Radiation Products, Inc.	Pt. 40 Rd, Flushing 58	NY
Rad-Proof Corp. Adv Pg 280	840 Canal St. Stamford	Conn
SHELL RESEARCH CORP. Adv Pg 27	11604 Dublin Blvd. Hayward	Cal
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Ed G. Clemenceau, Courbevoie, Seine	Fr
Tinsdale Reactor Monitoring Center	3000 Wright Ave, Richmond	Cal
UNITED NUCLEAR CORP., Adv Pg 26	205 Westchester Ave. New Haven 4	Conn
U. S. NUCLEAR CORP., Adv Pg 127	801 N Lake St. Box 2022, Burbank	Cal
Vickers Armstrong (S Marston) Ltd.	Swindon, Wiltshire	Eng

HOUSINGS—METAL

See CONSOLES, CABINETS & PANELS

HUMIDITY CONTROLS

See CONTROLS—HUMIDITY
GAGES—HUMIDITY

HYDRAULIC MECHANISMS

See Also CONTROL-ROD DRIVES
MOTORS—HYDRAULIC

AEG, Adv Pg 113-A	Hauptsitz, Frankfurt/Main, Germany	
AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
ALLIED ENGINEERING & PRODUCTION CORP. Adv Pg 242	3421 Blending Ave. Alameda	Cal
American Beach Arms Corp.	700 Fulton Ave. Hempstead	NY
Baldwin Industrial Controls	Dartford, Kent	Eng
Barnes & Reinecke, Inc.	200 E Ohio St. Chicago 11	Ill
Beckix Corp-Beckix Pacific Div.	11000 Sherman Way, N Hollywood	Cal
Beckix Corp. Beckix Products Div.	401 Beckix Dr. South Bend	Ind
Chamberlain Industries Ltd. Halfa Wks.	Argyll Ave. Leyton E10	Eng
CHANDLER EVANS CORP. Adv Pg 128	Charter Oak Blvd. West Hartford	Conn
Consolidated Controls Corp.	38 Decatur Ave. Bethel	Conn
Designers for Industry, Inc.	4541 Fulton Pkwy, Cleveland 9	Ohio
Electric Wire Div. Gen. Dynamics Corp.	Industrial Services Dept, 600, Groton	Conn
EX-CELLO CORP. ATOMICS DIV. Adv. Pgs. 8, 9	1200 Oakman Blvd. Detroit 32	Mich
Fansteel-Hoskins Co. Inc.	Anconia	Conn
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
Garrett Corp.	9851 Sepulveda Blvd, Los Angeles 45	Cal
HYDROSYNE CORP. Adv Pg 129	7230 Coldwater Canyon Ave. N Hollywood	Cal
Kaelaxtre Hydraulics Ltd.	Alliance, Coventry, Warwickshire, Eng	
Marco Mfg. Co.	Bradley	Ill
Marvel-Schebler Products Div. Borg-Warner Corp.	5195 S Ehrle Rd. Decatur	Ill
Mason, Shaver & Rhoades, Inc.	Box 551, Irvin	Pa
National Forge Co	Irvine, Warren County	Pa
New York Air Brake Co.	230 Park Ave, New York 17	NY
Parker Aircraft Co	5827 W Century Blvd, Los Angeles 45	Cal
Rosemount Controls Ltd.	640 Decarie Blvd, Montreal, Que, Can.	
RUCKER CO., THE, Adv Pg 107	4700 San Pablo Ave. Oakland 8	Cal
S. O. M.	125 rd Davout, Paris 20	Fr
Simmering Graz-Pauker AG	Simmeringer Hauptst. 96, Vienna 1	Aus
Salmer Bros. Ltd.	Winterthur	Swit
Telecomputing Corp.	8155 Aero Dr. San Diego 11	Cal
Tosi, S.p.A., Franco	Legnano, Milan	Ital
United Control Systems, Inc.	918 Woodley Rd. Dayton 3	Ohio
Vickers Armstrongs (Engg) Ltd.	Broadway, Westminster, London SW 1	Eng

HYDROGEN

See Under GASES

HYGROMETERS

Abbeon Supply Co.	179-15 Jamaica Ave, Jamaica 32	NY
American Instrument Co. Inc.	8030 Georgia Ave, Silver Spring	Md
Automation Products, Inc.	3800 Max Roy St, Houston 26	Tex
Baldwin Industrial Controls	Dartford, Kent	Eng
Bendix Corp. Friez Instrument Div.	1656 Taylor Ave, Baltimore 4	Md
Cambridge Instrument Co., Ltd.	13 Grosvenor Pl, London SW1, Eng	
CENTRAL SCIENTIFIC CO. Adv Pg 112	1700 Irving Park Rd. Chicago 13	Ill
CONTROLLED ATMOSPHERE ENCLOSURES MFG CO Adv Pg 88	Lemoore Air Base, Hanford	Fla
Gallenkamp & Co. Ltd., A.	Sun St, London, E. C. 2, England	
General Scientific Equipment Co.	Limestone & Williams, Philadelphia 50	Pa
H-B Instrument Co.	American & Bristol Sts. Philadelphia 40	Pa
Honeywell Controls, Ltd.	Vanderhoof Ave, Toronto, Ont Canada	
Kahl Scientific Instrument Corp.	Box 1148, El Cajon	Cal
HONEYWELL AER.CO. AER. FRIEZ GROUP. Adv. Pgs. 126, 240	Wayne & Walnut Aves. Phila. 44	Pa
Negretti & Zambra (Canada) Ltd	4 Berkeley Rd. Toronto 14	Ont
Nonberg Thermometer Co. Inc.	156 Livingston St. Brooklyn 3	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 187	Eindhoven	Neth
Sofnco Scientific Div. Schmaier & Co.	76 Cliff St, New York 38	NY
Science Associates, Inc.	106 Nassau St, W, Princeton	NJ
Sonlex, Inc.	22 Brookside Sq, Boston 14	Mass
Sartorius & Holdin AG.	Weissenbrunnenstr. 80, Kaiserslautern, Germany	
Taylor Instrument Co.	95 Ames St. Rochester 1	NY
Webster Instruments Corp.	105 E Merrick Rd. Freeport	NY
WELCH SCIENTIFIC CO. Adv Pg 108	1020 Sedgwick St. Chicago 10	Ill
Zeal Ltd., G. H.	Lombard Rd. Morden Rd. Merton, London SW19	Eng

INDICATORS

See Also CONTROLS
DETECTORS
GAGES
METERS

INDICATORS—CONTROL-ROD-POSITION

See Also CONTROL-ROD DRIVE SYSTEMS

AEG, Adv Pg 113-A	Hauptsitz, Frankfurt/Main, Germany	
A.E.I. Ltd.	20 Grosvenor Pl, London SW1, Eng	
Aeronac Industries Inc. Control Equip. Div.	Comly Ave, Greenwich	Conn
ALLIS-CHALMERS MFG. CO. Adv. Pgs. 109-111	900 S 70th St. Milwaukee	Wis
Applied Research (Instrument) Ltd.	Emerico House, Reigate	Eng
Bendix Corp. Montrose Div.	South Montrose	Pa
Bendix Edcom U.K. Ltd.	High Church St. New Romford, Hert.	Eng
Bristol Co.	Box 1790 MRC, Waterbury 86	Conn
Bryans Aerequipment Ltd.	Willow Lg, Milnthorpe, Surrey, England	
Cambridge Instrument Co., Ltd.	13 Grosvenor Pl, London SW1, Eng	
Collins Corp., G. L.	2020 E Hollott St. Long Beach 4	Cal
Consolidated Controls Corp.	16 Decatur Ave, Bethel	Conn
Curtiss-Wright Corp. Princeton Div.	Box 115, Princeton	NJ
DIAMOND POWER SPECIALTY CORP. Adv Pg 1	Box 415, Lancaster	Ohio
Electric Tachometer Corp.	68 & Upland Sts, Phila 49	Pa
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. Adv Pg 280	Box 608, San Diego 12	Cal
General Dynamics/Electronics	100 Carlson Rd, Rochester 5	NY
GENERAL ELECTRIC CO. APPARATUS SALES. Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Electric Co. Ltd. of England	Erith, Kent, England	
General Regulator Corp.	686 5th Ave, New York 19	NY
Hanna Engineering Works	1707 Elston Ave. Chicago 22	Ill
Hitachi, Ltd	1-4-chome Marunouchi, Chiyoda-ku, Tokyo	Jap
Jordan Controls Inc.	5656 W Hampton Ave, Milwaukee 9	Wis
Leeds & Northrup Co.	4901 Stenton Ave, Phila 44	Pa
Leeds & Northrup Ltd.	Broad St, Birmingham 15	Eng
Marvel-Schebler Products Div. Borg-Warner Corp.	5195 S Ehrle Rd. Decatur	Ill
SCIENTIFIC-ATLANTA, INC. Adv Pg 186	2162 Piedmont Rd. Atlanta	Ga
Siemens & Halske AG	Rheinbrucknstr. 10, Karlsruhe	Ger
Tapco Div. Thompson Ramo Wooldridge Inc.	23555 Euclid Ave, Cleveland 17	Ohio
Telecomputing Corp.	8155 Aero Dr. San Diego 11	Cal
TELEFLEX INC. Adv Pg 240	Church Rd. North Wales	Pa
UNITED NUCLEAR CORP., Adv Pg 26	205 Westchester Ave. New Haven 4	Conn
VARO, Adv Pg 125	2201 E Colorado, Pasadena	Cal
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. SECT. Adv. Pgs. 70, 71	Pittsburgh	Pa

INDICATORS—FLOW

See METERS—FLOW

INDICATORS—LIQUID-LEVEL

See Also CONTROLS—LIQUID-LEVEL

AEG, Adv Pg 113-A	Hauptsitz, Frankfurt/Main, Germany	

Acoustica Associates Inc.	10400 Aviation Blvd, Los Angeles 45	Cal
Aeonic Industries Inc. Control Equip. Div.	Gently Ave, Greenwich	Conn
Aircraft Porous Media, Inc.	Glen Cove	NY
Allentown-Standard Controls Div.	6900 Trumbell, Detroit 8	Mich
Appleby & Ireland, Ltd.	Mark Lane, Basingstoke, Hants	Eng
Applied Research (Instruments) Ltd.	Emerico House, Reigate	Eng
Atomics International Div. NAA	Box 309, Canoga Park	Cal
Atomium Corp.	940 Main St, Waltham	Mass
Automation Products, Inc.	3030 Max Roy St, Houston 24	Tex
B-I-F Industries, Div. MT Air Brake Co.	500-D Harris Ave, Providence 1	RI
B/W Controller Corp.	2200 E Maple Rd, Birmingham	Mich
BAILEY METER CO. Adv Pg 69	29801 Euclid Ave, Wickliffe	Ohio
Bailey Meter Co, Ltd.	6010 St, Catherine St, W, Montreal, Que	Can
Barco Instrument Corp.	800 Monterey Pass Rd, Monterey Park	Cal
Beckman Corp. Montrose Div.	South Montrose	Pa
Bristol Co.	Box 1790 NHC, Waterbury 20	Conn
Brooks Instrument Co, Inc.	407 W Vine St, Hatfield	Pa
Burndept Ltd.	West St, Erith, Kent, Eng	
Conoflow Corp.	2100 Arch St, Philadelphia 3	Pa
Consolidated Controls Corp.	14 Durant Ave, Bethel	Conn
Crane Co, Ind. Prods Gr.	4100 S Kedzie Ave, Chicago 32	Ill
Devisomer & Co., Ltd.	Great Dover St, London SE1, England	
DIAMOND POWER SPECIALTY CORP. Adv Pg 1	Box 415, Lancaster	Ohio
Dr. Vitro KG	20 Rosenburgweg, Bonn	Ger
Dynatech Corp.	629 Massachusetts Ave, Cambridge 39	Mass
Eckardt AG, J. C.	Pragier, 72/III, Stuttgart-bad Cannstatt	Ger
Electrolo Motors Co, Ltd.	Abbey Rd, Park Royal, NW 10, London	Eng
ELECTRONIC ASSOCIATES, LTD. Adv Pg 21	4616 Yonge St, Willowdale, Ont	Can
Equipment Industrial Brasil Ltda.	Box 2384, Rio de Janeiro	Braz
Evershed & Vignoles, Ltd. Acton Lane Wks.	Chiswick, London W4	Eng
Fisiline Electronics Ltd.	Powys Rd, Wythenshawe, Man 22, Eng	
Fuji Cleveland Instruments Ltd.	Trefonen, Penybydd, Glamorgan	Wls
Fischer & Porter Co.	60 Warminster Rd, Warminster	Pa
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
FOXBORO CO. Adv Pg 189	38 Neponset Ave, Foxboro	Mass
General Controls Co.	801 Allen Ave, Glendale 1	Cal
General Dynamics/Electronics	144 Carlton Rd, Rochester 3	NY
Gilt Bros. Mfg. Co.	1846 S Kilbourn Ave, Chicago 23	Ill
Hanna Engineering Works	1707 Elston Ave, Chicago 22	Ill
Hastings-Raydist, Inc.	Newcomb Ave, Hampton	Va
Helios Electrical Instrument CO.	10601 Dupont Ave, Cleveland 8	Ohio
Honeywell Controls, Ltd.	Vanderbilt Ave, Toronto, Ont Canada	
Industrial Instrument Corp.	Drawer 777, Austin	Tex
Industrial Nucleonics Corp.	650 Ackerman Rd, Columbus 2	Ohio
Instruments Inc.	Box 486, Tulsa	Okla
INTERNATIONAL INSTRUMENTS, INC. Adv. Pgs. 226, 239	Box 2564, New Haven 15	Conn
ISOTOPE DEVELOPMENTS LTD. Adv Pg 74	Bath Rd, Beaulieu, Reading, Berks	Eng
Jorgensen Gage & Valve Co.	Adams St, Burlington	Mass
Liquid Metals, Inc.	Box 3066, Wurford	Mass
Lock & Co. Ltd., A. M.	Union St, Oldham, Lancs, England	
MSA Research Corp	Callery	Pa
Marion Instrument Co.	10280 Mallon Ave, Cleveland 5	Ohio
MINN.-HONEYWELL REG CO. MOL PRODS GROUP, Adv. Pgs. 126, 240	Wayne & Windrim Aves. Phila. 44	Pa
Needs Ultrasonics Corp.	200 Michael Dr, Syosset	NY
Negretti & Zambra (Canada) Ltd	4 Berthell Rd, Toronto 14	Ont
NERATOMA, N. V., Adv Pg 113-F	Hoordstraat 30, The Hague	Neth
Nuclear Research Corp.	Southampton	Pa
Olmart Corp.	2230 Dugan St, Cincinnati 14	Ohio
Pell Corp.	Glen Cove	NY
Pesax Equipment, Ltd.	Holmethorpe Ind Estate, Redhill, Surrey	Eng
Paxmann Ltd.	54 Princes St, Hanover Sq, London W1	Eng
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 187	Eindhoven	Neth
Radiation Inc.	Lafayette & Water Sts, Norristown	Pa
Republic Flow Meter Co.	2260 Diversey Pkwy, Chicago 47	Ill
Robertshaw-Fulton Controls Co. Fulton Sylphon Div.	Box 400, Knoxville 1	Tenn
Roy Co., Milton	1200 E Mermaid Ln, Phila 18	Pa
S.A.E.P.	38, Rue Gabriel Crie, Malakoff, Seine	Fr
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Siemens & Halske AG	Rheinbrucknstr, 50, Karlsruhe, Germany	
Sittmann Precision Products, Inc.	105 White Plains Rd, Tarrytown	NY
Thompson, Ltd., John	Wolverhampton	Eng
ULTRASONIC INDUSTRIES, INC. Adv Pg 66	Acme Cr. Expo. Hill, Plainview	NY
UNITED NUCLEAR CORP., Adv Pg 36	563 Westchester Ave, New Haven 4	Conn
Victory Engineering Corp.	Springfield Ave, Springfield	NJ
Yarnall-Waring Co.	110 E Mermaid Ln, Phila 18	Pa

INDICATORS—PLOGGING

AEG, Adv Pg 113-A	Hauptsitz, Frankfurt/Main, Germany	
Aircraft Porous Media, Inc.	Glen Cove	NY
Beckman Corp. Montrose Div.	South Montrose	Pa
Liquid Metals, Inc.	Box 3066, Wurford	Mass
MSA Research Corp.	Callery	Pa

INDICATORS—PRESSURE
See GAGES—PRESSURE

INDICATORS—RADIATION
See COUNTERS—RADIATION

INDICATORS—TIMING
See Also CONTROLS—TIMING

AEG, Adv Pg 113-A	Hauptsitz, Frankfurt/Main, Germany	
American Time Products Div. Bulova Watch Co. Inc.	61-20 Woodside Ave, Woodside 77	NY
Beckman Corp. Montrose Div.	South Montrose	Pa
Brewster Instrument Corp.	6900 Bluffton Rd, Fort Wayne	Ind
Dynatech Corp.	629 Massachusetts Ave, Cambridge 39	Mass
General Controls Co.	801 Allen Ave, Glendale 1	Cal
GENERAL ELECTRICCO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
Hayden Co., A. W.	580 N Elm St, Waterbury	Conn
Industrial Timer Corp.	1407 McCarter Hwy, Newark 4	NJ
Leeds & Northrup Ltd.	Broad St, Birmingham 15	Eng
Mariam Instrument Co.	10280 Mallon Ave, Cleveland 5	Ohio
UNITED NUCLEAR CORP., Adv Pg 36	563 Westchester Ave, New Haven 4	Conn
Venner Electronics Ltd.	Kingston By-Pass, New Malden, Surrey	Eng
Waltham Precision Instrument Co.	921 Crescent St, Waltham 54	Mass

INDICATORS—VALVE-POSITION

AEG, Adv Pg 113-A	Hauptsitz, Frankfurt/Main, Germany	
Aeonic Industries Inc. Control Equip. Div.	Gently Ave, Greenwich	Conn
Aircraft Porous Media, Inc.	Glen Cove	NY
Applied Research (Instruments) Ltd.	Emerico House, Reigate	Eng
B-I-F Industries, Div. MT Air Brake Co.	500-D Harris Ave, Providence 1	RI
BAILEY METER CO. Adv Pg 69	29801 Euclid Ave, Wickliffe	Ohio
Bailey Meter Co. Ltd.	6010 St, Catherine St, W, Montreal, Que	Can
Beckman Corp. Montrose Div.	South Montrose	Pa
Beckly Scientific Co.	2011 7th St, Berkeley 10	Cal
Bristol Co.	Box 1790 NHC, Waterbury 20	Conn
Clayton Engineering Co.	Holland St, Chesley, Surrey, England	
Collins Corp., G. L.	3800 E Hulbert St, Long Beach 8	Cal
Consolidated Controls Corp.	14 Durant Ave, Bethel	Conn
Dynatech Corp.	629 Massachusetts Ave, Cambridge 39	Mass
Eckardt AG, J. C.	Pragier, 72/III, Stuttgart-bad Cannstatt	Ger
Evershed & Vignoles, Ltd. Acton Lane Wks.	Chiswick, London W4	Eng
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
FOXBORO CO. Adv Pg 189	38 Neponset Ave, Foxboro	Mass
General Controls Co.	801 Allen Ave, Glendale 1	Cal
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
Hanna Engineering Works	1707 Elston Ave, Chicago 22	Ill
Honeywell Controls, Ltd.	Vanderbilt Ave, Toronto, Ont Canada	
Johnson Service Co.	Milwaukee 1	Wis
Jordan Controls Inc.	3035 W Hampton Ave, Milwaukee 9	Wis
Leeds & Northrup Ltd.	Broad St, Birmingham 15	Eng
MINN.-HONEYWELL REG CO. MOL PRODS GROUP, Adv. Pgs. 126, 240	Wayne & Windrim Aves. Phila. 44	Pa
Pell Corp.	Glen Cove	NY
Parker Aircraft Co	5817 W Century Blvd, Los Angeles 45	Cal
Republic Flow Meter Co.	2260 Diversey Pkwy, Chicago 47	Ill
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
SCIENTIFIC-ATLANTA, INC. Adv Pg 106	2162 Piedmont Rd, Atlanta	Ga
Siemens & Halske AG	Rheinbrucknstr, 50, Karlsruhe, Germany	
UNITED NUCLEAR CORP., Adv Pg 36	563 Westchester Ave, New Haven 4	Conn
Vacuum Research (Cambridge) Ltd.	Quayside, Bridge St, Cambridge, Eng	
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. SECT. Adv. Pgs. 70, 71	Pittsburgh	Pa

INDICATOR TUBES
See DIGITAL INDICATING DEVICES

INDUCTANCES

AEG, Adv Pg 113-A	Hauptsitz, Frankfurt/Main, Germany	
A.E.L. Ltd.	33 Grosvenor Pl, London SW1, Eng	
Cambridge Thermionic Corp.	446 Concord Ave, Cambridge 38	Mass
Coastal Transformer Co.	800 W Jackson Blvd, Chicago 7	Ill
Comell-Dubilier Electronics Div. Fed. Pac. Elec. Co.	50 Paris St, Newark 1	NJ
Electro Engineering Works	401 Peralta St, San Leandro	Cal
Fenel Transformer Co., Inc.	1718 Weirfield St, Brooklyn 37	NY
General Radio Co.	West Concord	Mass
Grand Transformer, Inc.	Marine & Beach Tree Sts, Grand Haven	Mich
Millen Mfg. Co., James	150 Exchange St, Malden	Mass
North Hills Electronics, Inc.	Alexander Pl, Glen Cove	NY
Oberlin Mfg. Co.	3861 Howard St, Skokie	Ill
Polyphase Instrument Co.	2 4th St, Bridgeport	Pa
Raytheon Co. Microwave & Power Tube Div. Spencer Laboratory	Burlington	Mass
Sibet Dujardin	13 rue Perier, Montrouge, Seine	Fr
Sangamo Electric Co.	11 & Converse Sts, Springfield	Ill
Sickles Div. Gen. Instrument Corp.	103 Front St, Chicopee	Mass
Speer Carbon Co.	Theresia St., St. Marys	Pa
Standard Winding Co. Div. Oxford Corp.	66-02 Jelmes St, Newburgh	NY
Telecomputing Corp.	8125 Aero Dr. San Diego 11	Cal
Telectro Industries Corp.	35-16 37th St. LIC 1	NY
Torwico Electronics, Inc.	Box 70, Lakewood	NJ
Valor Instruments, Inc.	13214 Crenshaw Blvd, Gardena	Cal
Varl-I Co. Inc.	207 Greenwich Ave, Stamford	Conn

IN-PILE TEST DESIGN
See SERV. & CONS'LT: IN-PILE TEST DESIGN

INSPECTION EQUIPMENT
See EDDY-CURRENT EQUIPMENT
FLUOROSCOPES—X-RAY
METALLOGRAPHIC EQUIPMENT
RADIOGRAPHIC EQUIPMENT
TEST EQUIPMENT—NONDESTRUCTIVE
ULTRASONIC EQUIPMENT

INSTRUMENT PARTS—PRECISION

AEG, Adv Pg 113-A	Hauptsitz, Frankfurt/Main, Germany	
Atomic Devel. & Machine Corp.	15-04 120 St, College Point 56	NY
Barnes Development Co	212 W Baltimore Pike, Lansdowne	Pa
Bausch & Lomb, Inc.	50402 Bausch St, Rochester 2	NY
Brewster Instrument Corp.	6000 Bluffton Rd, Fort Wayne	Ind
DEL ELECTRONICS CORP. Adv Pg 26	521 Hempstead Ave, W. Venice	NY
Dr. Vitro KG	20 Rosenburgweg, Bonn	Ger
Dynage Inc.	208 Capitol Ave, Hartford	Conn
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
JERPSAK-BAYLESS CO., Adv Pg 189	24102 Lakes Rd, Lakes	Ohio
LAMBARR INC. DIV. EVERLECTRON INC. Adv Pg 204	2444 W Wilson Ave, Chicago 25	Ill
Librascope Div. Gen. Precision, Inc.	Glendale 1	Cal
Link Div. - Gen. Precision, Inc.	Binghamton	NY
Linos Industries	336 N Foothill Rd, Beverly Hills	Cal
M. Tex Beck, Inc.	80 Wheeler Ave, Pleasantville	NY
Markite Corp.	155 Waverly Pl, New York 14	NY
Mason, Slover & Hendrix, Inc.	Box 181, Delta	Pa
Metal Bellows Corp.	878 Mass Line Wellesley	Mass
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1000 Nuces St, Apollo	Pa
Oberlin Engines Ltd.	Box 4916 Term A, Toronto	Can
Precision Mechanisms Corp	44 Brooklyn Ave, Westbury	NY
Pye & Co. Ltd., W. G.	Twig St, Cambridge, England	
RADIATION TECHNOLOGY, INC. Adv. Pg. 3rd Cover	657 Aurora St, NW, Atlanta 18	Ga
Reeves Instrument Corp.	E Gate Blvd, Garden City	NY
Research Development Manufacture, Inc.	423 E Collins St, Philadelphia 44	Pa
Simpson Electric Co. Div. Amer. Gage & Mach Co.	5200 W Kinzie St, Chicago 44	Ill
Technology Instrument Corp	531 Main St, Acton	Mass
Telecomputing Corp.	8125 Aero Dr. San Diego 11	Cal
Vogue Instrument Corp.	2205 Linden Blvd, Brooklyn 8	NY

INSTRUMENT SYSTEMS—REACTOR
See REACTOR INSTRUMENT SYSTEMS

INSULATION—THERMAL

Ashton Mfg. Co.	500 Stack St, Middletown	Conn
Carborundum Co. Refractories Div.	Perth Amboy	NJ
Carborundum Co. R & D Div	New Prods. Br. NHC, Niagara Falls	NY
Degussa	Box 3860 Frankfurt/Main	Ger
Denver Fire Clay Co.	Box 5810, Denver 17	Colo
Dow Chemical Co.	Midland	Mich
Eagle-Picher Co.	Atlantian Bldg. Cincinnati 1	Ohio
Foster Co., Benjamin	4855-57 W Girard Ave, Philadelphia 31	Pa
Gordon Co., Claud S.	630 W 30 St, Chicago 16	Ill
Ipsen Industries, Inc.	Box 800, Rockford	Ill
Johns-Manville	22 E 40th St, New York 16	NY
Kinney's Insulators Ltd.	London Rd, Reading, Berks, England	
Markel & Sons, L. Frank	School House Ln, Norristown	Pa
Mica Insulator Div. Mikiol	797 Broadway, Schenectady 1	NY
Monsanto Chemicals Ltd.	10/18 Victoria St, London SW1	Eng
PHYSICAL SCIENCES CORP. Adv Pg 26	209 N Fair Oaks Ave, Pasadena	Cal
Reinsulator Corp.	Woodland Rd, Rockland	NJ
Sauereisen Cements, Inc.	Box 197, Sauereisen	Pa
Telecomputing Corp.	8125 Aero Dr. San Diego 11	Cal
Thompson Fiber Glass Co., H. L.	1720 Cordova St, Los Angeles 7	Cal
Zonolite Co.	135 S La Salle St, Chicago 3	Ill

INSULATORS & INSULATION—ELECTRICAL

A.E.L. Ltd.	33 Grosvenor Pl, London SW1, Eng	
Allen Div. U. S. Stoneware Co.	Box 119, Orrville	Ohio
ALLIED ENGINEERING & PRODUCTION CORP., Adv Pg 242	2420 Blending Ave, Alameda	Cal
Alsthom, Nuclear Div.	38, Ave. Kleber, Paris 16, France	
Asheville-Schoonmaker Mica Co.	900 Jefferson Ave, Newport News	Va
Ashton Mfg. Co.	500 Stack St, Middletown	Conn
Bacon Industries, Inc.	192 Pleasant St, Watertown	Mass
Brand, William, Sen Div. Am. Ruba Corp.	21 Sudbury Rd, Concord	Mass
Cambridge Thermionic Corp.	446 Concord Ave, Cambridge 38	Mass
Carborundum Co. Refractories Div.	Perth Amboy	NJ
Centramel, Inc.	Box 55, Dept. NHC, New Lebanon Center	NY
Continental-Diamond Fibre Corp.	Newark	Del
Degussa	Box 3860 Frankfurt/Main	Ger
Dow Corning Corp.	Midland	Mich
Engelhard Industries, Inc.	113 Astor St, Newark 2	NJ
Garde Mfg. Co.	53 John St, Cumberland	RI
Gerlach Electronic Products	Camden 1	NJ
General Electric Co. Laminated Prod Dept.	Coshocton	Ohio
General Electric Co. Ltd. of England	Erith, Kent, England	
Gordon Co., Claud S.	630 W 30 St, Chicago 16	Ill

1961-1962 DIRECTORY of

Nalleri Mfg. Co.	5710 Bowcroft St, Los Angeles 16	Cal
Hitachi, Ltd	1-4-chome Marunouchi, Chiyoda-ku, Tokyo	Jap
Industrio Mfg. Corp	337 Warren Ave, Stirling	NJ
Job-O-Steinbeck	Bernbeck, Bz. Hamb, Germany	
Johns-Manville	22 E 40th St, New York 16	NY
Lignosine Import Co.	Box 65, Grand Sta, New York 58	NY
Line Material Industries, McGraw-Edison Co.	Milwaukee 1	Wis
Lonrow Rubber Co.	Box 5191, Trenton 7	NJ
Maciaal & Sons, L. Frank	School House Ln, Merchantown	Pa
Mica Insulator Div, MMM	795 Broadway, Schenectady 1	NY
Monsanto Chemicals Ltd.	10/18 Victoria St, London SW1	Eng
National Beryllia Corp.	1st & Haskell Ave, Haskell	NJ
National Vulcanized Fibre Co.	Maryland Ave & Beech Sts, Wilmington 99	Del
Nuclear Research Associates, Inc.	20-15 Hunters Pt. Ave, LIC 1	NY
Penn Fibre & Specialty Co.	5880 E Westmoreland St, Philadelphia 24	Pa
PERMALL, INC. Adv Pg 159	Box 718, Mt. Pleasant	Pa
PHYSICAL SCIENCES CORP. Adv Pg 28	309 N Fair Oaks, Pasadena	Cal
Polymer Corp.	2330 Paiment Ave, Reading	Pa
Porcelain Products, Co.	1026 N Perimeter St, Canton	Ohio
Quartz & Silica, S. A.	8 rue d' Anjou, Paris	Fr
Radiation Applications, Inc.	36-40 37th St, Long Island City 1	NY
Resinoflex Corp.	Woodland Rd, Woodland	NJ
Sassaling Ceramics, Inc.	Box 187, Sassaling	Pa
Shanahan & Co., W. S.	13617 Jefferson Blvd, Culver City	Cal
Star Porcelain Co.	33 Medford Ave, Trenton	NJ
Synthane Corp.	River Rd, Oak	Pa
Telecomputing Corp.	6126 Auto Dr, San Diego 11	Cal
Thompson Fibre Glass Co., H. L.	1720 Cordova St, Los Angeles 7	Cal
TOKYO SHIBAURA ELECTRIC CO. LTD. Adv Pg 229	12 Tsuruo-cho 1-Chome, Chiyoda-ku, Tokyo	Jap

INSURANCE
See SERV. & CONS'LT: INSURANCE

INTERCOMS
See COMMUNICATION SYSTEMS

ION-EXCHANGE EQUIPMENT
See Also DEMINERALIZERS
RESINS—ION-EXCHANGE
WATER CONDITIONERS

Baker Ind Equip Div Bogue Elec Mfg Corp.	100 Pennsylvania Ave, Paterson	NJ
California Corp for Biochemical Research	2025 Medford St, Los Angeles 63	Cal
Chemical Separations Corp.	Box 1031, Oak Ridge	Tenn
Chem-Pure Service Co.	702 Industrial Rd, San Carlos	Cal
Cochrane Corp.	3214 17th St, Philadelphia 32	Pa
Crystal Research Labs, Inc.	20 Alpha St, Hartford	Conn
ELGIN SOFTENER CORP. Adv Pg 116	179 N Grove Ave, Elgin	Ill
Gamer Water Conditioning Co.	216 W 14 St, New York 11	NY
HAGAN CHEMICALS & CONTROLS, INC. Adv Pg 30	Box 1346, Pittsburgh 30	Pa
Illinois Water Treatment Co.	840 Cedar St, Rockford	Ill
Infilco, Inc.	Box 5026, Tucson	Ariz
Lodmex & Co.	209 Alfred Ave, Teaneck	NJ
Penfield Mfg. Co. Inc.	40 Britania St, Meriden	Conn
Permutit Co. Div. Pfaudler Permutit Inc.	50 W 44th St, New York 36	NY
Salem-Brosius Inc.	Box 2325, Pittsburgh 30	Pa
Scientific Glass Apparatus Co. Inc.	199 Lakewood Ave, Bloomfield	NJ
STEARNS-ROGER MFG. CO. Adv Pg 32	Box 5888, Denver 17	Colo
Thompson, Ltd., John	Wolverhampton, England	
Vannes pour le Traitement des Eaux, S A	1 Quai des Vennes, Liege	Belg
Will Corp.	Box 1066, Rochester 3	NY

ION-GAGE TUBES
See CONTROLS—VACUUM

IONIZATION CHAMBERS
See CHAMBERS—IONIZATION

IRRADIATED PLASTICS
See PLASTICS—IRRADIATED

IRRADIATION—ACCELERATOR
See SERV. & CONS'LT: IRRADIATION-ACCELERATOR

IRRADIATION—ISOTOPIC
See SERV. & CONS'LT: IRRADIATION-ISOTOPIC

IRRADIATION—REACTOR
See SERV. & CONS'LT: IRRADIATION-REACTOR

IRRADIATORS—MEDICAL, ISOTOPIC
See Also ACCELERATORS

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave, Greenwich	Conn
AMERAY CORP., Adv Pg 113	Route 46, Kenvil	NJ
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV., Adv. Pgs. 115, 231	Box 93, Ottawa, Ont	Can
Atomics International Div. NAA Inc.	Box 309, Canoga Park	Cal
Barnes Co., W. F. & John	301 S Water St, Rockford	Ill
Cook Electric Co. Cook Tech Ctr.	6601 W Oakton St, Morton Grove	Ill
Curtiss-Wright Corp, Princeton Div.	Box 115, Princeton	NJ
Equipment Atomica Brasileira Ltda.	Box 2094, Rio de Janeiro	Braz
Hitachi, Ltd.	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
Hunter Precision Engrg. Ltd.	Leeds, 10, England	
Knapp Mills Inc.	23-15 Borden Ave, LIC	NY
Miles Hivolt Ltd	256 Shoreham Rd, Shoreham-by-Sea, Sussex	Eng
NERATOON, N. V., Adv Pg 113-F	Heerdstraat 20, The Hague	Neth
Neuron Products, Inc	1007 Thos. Jefferson St NW, Wash 7	DC
Nuclear Consultants Corp.	8040 Manchester Rd, St. Louis 19	Mo
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1000 Vanco St, Apollo	Pa
Ohio Nuclear Inc.	27105 Knickerbocker Rd, Cleve 40	Ohio
Pantatom Ltd.	56 Princes St, Hanover Sq, London W1,	Eng
Picker X-Ray Corp.	25 S Broadway, White Plains	NY
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	883 Herrick Rd, Lynbrook	NY
Radiation Products, Inc.	Pt. 40 Rd, Flushing 52	NY
UNITED NUCLEAR CORP., Adv Pg 36	360 Wooster Ave, New Haven 4	Conn
U. S. NUCLEAR CORP., Adv Pg 127	801 N Lake St, Box 2022, Burbank	Cal
X-Ray Dept. of General Electric Co.	4855 Electric Ave, Milwaukee	Wis

IRRADIATORS—PROCESS, ISOTOPIC
See Also ACCELERATORS
SOURCES—RADIOACTIVE

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave, Greenwich	Conn
AMERAY CORP., Adv Pg 113	Route 46, Kenvil	NJ
AMERICAN NUCLEAR CORP. Adv Pg 198	Box 438, Oak Ridge	Tenn
Armstrong Whitworth Equipment	Hucclecote, Gloucester	Eng
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV., Adv. Pgs. 115, 231	Box 93, Ottawa, Ont	Can
Atomics International Div. NAA Inc.	Box 309, Canoga Park	Cal
Budd Co. Instruments Div.	Box 245, Phoenixville	Pa
Cook Electric Co. Cook Tech Ctr.	6601 W Oakton St, Morton Grove	Ill
Curtiss-Wright Corp, Princeton Div.	Box 115, Princeton	NJ
FRAZAR & HANSEN LTD. Adv Pg 113-E	301 Clay St. San Francisco	Cal
Hitachi, Ltd	1-4-chome Marunouchi, Chiyoda-ku, Tokyo	Jap
Hunter Precision Engrg. Ltd.	Leeds 10	Eng
INTERNUCLEAR CO., Adv Pg 240	7 N Brentwood Blvd, Clayton 5	Mo
Knapp Mills Inc.	23-15 Borden Ave, LIC	NY
Neuron Products, Inc	1007 Thos. Jefferson St NW, Wash 7	DC
Nuclear Consultants Corp.	8040 Manchester Rd, St. Louis 19	Mo
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1000 Vanco St. Apollo	Pa
Ohio Nuclear Inc.	27105 Knickerbocker Rd, Cleve 40	Ohio
Pantatom Ltd.	56 Princes St, Hanover Sq, London W1,	Eng
Picker X-Ray Corp.	25 S Broadway, White Plains	NY
Radiation Applications, Inc.	36-40 37th St. Long Island City 1	NY
Radiation Dynamics Inc.	Westbury Ind, Pk, Westbury	NY
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	883 Herrick Rd. Lynbrook	NY
Radiation Products, Inc.	Pt. 40 Rd, Flushing 52	NY
Radionics Inc.	Lafayette & Water Sts. Northtown	Pa
UNITED NUCLEAR CORP., Adv Pg 36	360 Wooster Ave. New Haven 4	Conn
U. S. NUCLEAR CORP., Adv Pg 127	801 N Lake St. Box 2022, Burbank	Cal

ISOTOPE CONTAINERS
See SHIELDING—RADIATION

ISOTOPE-LABELED COMPOUNDS

Abbott Laboratories	Box 1008, Oak Ridge	Tenn
Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Amersham-Searles Corp	111 W Jewel Ave, St. Louis 22	Mo
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV., Adv. Pgs. 115, 231	Box 93, Ottawa, Ont	Can
BELGONUCLEAIRE, Adv Pg 113-L	25 rue des Colonies, Brussels 1	Belg
Bio-Rad Laboratories	1257 S 32nd St, Richmond	Cal
Bios Laboratories, Inc.	17 W 60th St, New York 23	NY
California Corp for Biochemical Research	2025 Medford St. Los Angeles 63	Cal
ChemTrac Corp.	130 Alewife Brook Pkwy. Cambridge 40	Mass
Commissariat a L'Energie Atomique	B.P. 2 Gif-sur-Yvette, S. O.	Fr
D. I. S. I. Nuclear Corp.	Via A. Boccioni 20, Milan	Ital
Dr. Vinn KG	20 Rosenhagenweg, Bonn	Ger
HAZLETON-NUCLEAR SCIENCE CORP. Adv Pg 30	4062 Fabian Way, Palo Alto	Cal
ISOMET CORP., Adv Pg 94	433 Commercial Ave. Palisades Park	NJ
Isotopes Specialties Co.	Box 808, Burbank	Cal
JOHNSON & ASSOCIATES, INC. WILLIAM R., Adv Pg 230	Box 475, Montvale Lakes	NJ
Metzler Lab Inc	191 Mill Lane, Mountainside	NJ
Mallinckrodt Co.	500 Paterson Plank Rd, E Rutherford	NJ
Merck Sharp & Dohme of Canada Ltd.	550 DeCourcelle St, Montreal 3	P. Q.
NERATOON, N. V., Adv Pg 113-F	Heerdstraat 20, The Hague	Neth
New England Nuclear Corp.	575 Albany St, Boston	Mass
Nichem Div. Nuclear Industries, Inc.	Box 5727, Bethesda 14	Md
NUCLEAR-CHICAGO CORP., Adv. Pgs. 56-57	343 E Howard Ave, Des Plaines	Ill
Nuclear Consultants Corp.	8040 Manchester Rd, St. Louis 19	Mo
Nuclear Research Associates, Inc.	20-15 Hunters Pt. Ave. LIC 1	NY
Nuclear Science & Engineering Corp.	Box 10801, Pittsburgh 36	Pa
NUCLEONIC CORP. OF AMERICA, Adv Pg 208	196 Dupont St. Brooklyn 21	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V., Adv Pg 187	Eindhoven	Neth
Picker X-Ray Corporation	1275 Mamaroneck Ave. White Plains	NY
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	883 Herrick Rd. Lynbrook	NY
RADIOCHEMICAL CENTRE, THE, Adv Pg 102	White Lion Rd. Amersham, Buckinghamshire	Eng
Research Specialties Co.	500 S Garnett Blvd, Richmond	Cal
S.E.R.A.L. Adv Pg 113-J	1091 chaussee d'Alsemberg, Brussels 18	Belg
SHOWA DENKO K. K., Adv Pg 113-G	34 Shiba Miyamoto-cho, Minato-ku, Tokyo	Jap
Squibb & Sons, E. R.	745 5th Ave, New York 22	NY
TERRELL RADIO INTERNATIONAL LTD. Adv Pg 113-C	240 W 17th St. New York 11	NY
TRACERLAB INC. Adv. Pgs. 124, 113-5	1601 Trapelo Rd. Waltham 54	Mass
U. S. NUCLEAR CORP., Adv Pg 127	801 N Lake St. Box 2022, Burbank	Cal
Volk Radiochemical Co.	6160 Elmwood Ave, Skokie	Ill
YEDA RESEARCH & DEVELOPMENT CO. LTD. Adv Pg 231	Rehovoth	Israel

ISOTOPES—RADIOACTIVE
See Also BATTERIES—NUCLEAR
SOURCES—RADIOACTIVE

Abbott Laboratories	Box 1008, Oak Ridge	Tenn
Aerojet-General Nucleonics	Box 77, San Ramon	Cal
AMERICAN NUCLEAR CORP. Adv Pg 198	Box 438, Oak Ridge	Tenn
Amersham-Searles Corp	111 W Jewel Ave, St. Louis 22	Mo
ATOMIC ACCESSORIES, INC., Adv Pg 206	611 W Merrick Rd. Valley Stream	NY
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV., Adv. Pgs. 115, 231	Box 93, Ottawa, Ont	Can
Atomic Lab Sub, Cosco	3000 Claremont Ave, Berkeley 5	Cal
ATOMIC RESEARCH LAB. DIV. ATOMIC CORP. OF AMERICA, Adv Pg 184	14723 Arminta St. Panorama City	Cal
BELGONUCLEAIRE, Adv Pg 113-L	25 rue des Colonies, Brussels 1	Belg
Bio-Rad Laboratories	1257 S 32nd St, Richmond	Cal
Bios Laboratories, Inc.	17 W 60th St, New York 23	NY
Budd Co. Instruments Div.	Box 245, Phoenixville	Pa
California Corp for Biochemical Research	2025 Medford St. Los Angeles 63	Cal
ChemTrac Corp.	130 Alewife Brook Pkwy. Cambridge 40	Mass
Commissariat a L'Energie Atomique	B.P. 2 Gif-sur-Yvette, S. O.	Fr
CONTROLS FOR RADIATION, INC. Adv Pg 189	130 Alewife Brook Pkwy. Cambridge 40	Mass
Cotta Nuclear Corp.	2642 W 23rd St, Gardena	Cal
D. I. S. I. Nuclear Corp.	Via A. Boccioni 20, Milan	Ital
Falk & Co. Ltd., M.	Emerico House, Brigate Sunny	Eng
Fleischman, Ford & Co. Inc.	1271 Ave. of Americas, New York 20	NY
FRAZAR & HANSEN LTD. Adv Pg 113-E	301 Clay St. San Francisco	Cal
Gamma Industrie	63 Rue de Dunkerque, Paris 9	Fr
Gamma Industries, Inc.	Box 10643, Baton Rouge	La
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
HAZLETON-NUCLEAR SCIENCE CORP. Adv Pg 30	4062 Fabian Way, Palo Alto	Cal
Institut for Atomenergi	Box 170, Lillestrom, Kjeller	Nor
Isotopes Specialties Co.	Box 808, Burbank	Cal
Kinney Mills Inc.	23-15 Borden Ave, LIC	NY
Merck Sharp & Dohme of Canada Ltd.	550 DeCourcelle St, Montreal 3	P. Q.
NERATOON, N. V., Adv Pg 113-F	Heerdstraat 20, The Hague	Neth
Neuron Products, Inc	1007 Thos. Jefferson St NW, Wash 7	DC
New England Nuclear Corp.	575 Albany St, Boston	Mass
Nichem Div. Nuclear Industries, Inc.	Box 5727, Bethesda 14	Md
NUCLEAR-CHICAGO CORP., Adv. Pgs. 56-57	343 E Howard Ave. Des Plaines	Ill
Nuclear Consultants Corp.	8040 Manchester Rd. St. Louis 19	Mo
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1000 Vanco St. Apollo	Pa
Nuclear Science & Engineering Corp.	Box 10801, Pittsburgh 36	Pa
NUCLEONIC CORP. OF AMERICA, Adv Pg 208	196 Dupont St. Brooklyn 21	NY
OAK RIDGE NATL LAB. ISOTOPES SALES DEPT. Adv Pg 226	Box X, Oak Ridge	Tenn
Chemet Corp.	2236 Rogers St, Cincinnati 22	Ohio
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 187	Eindhoven	Neth
Picker X-Ray Corp.	25 S Broadway, White Plains	NY
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	883 Herrick Rd. Lynbrook	NY
RADIOCHEMICAL CENTRE, THE, Adv Pg 102	White Lion Rd. Amersham, Buckinghamshire	Eng
Squibb & Sons, E. R.	745 5th Ave. New York 22	NY
TERRELL RADIO INTERNATIONAL LTD. Adv Pg 113-C	240 W 17th St. New York 11	NY
TRACERLAB, INC. Adv. Pgs. 124, 113-5	1601 Trapelo Rd. Waltham 54	Mass
U. S. NUCLEAR CORP., Adv Pg 127	801 N Lake St. Box 2022, Burbank	Cal
U. S. RADIUM CORP., Adv Pg 186	Box 244, Morristown	NJ
VICTOREEN INSTRUMENT CO., Adv. Pg. 4th Cover	5800-11 Hough Ave. Cleveland 3	Ohio
Volk Radiochemical Co.	6160 Elmwood Ave, Skokie	Ill
WESTINGHOUSE TESTING REACTOR, Adv. Pgs. 195 & 70, 71	Box 1073, Pittsburgh 30	Pa

ISOTOPES—STABLE

Abbott Laboratories	Box 1008, Oak Ridge	Tenn
Aerojet-General Nucleonics	Box 77, San Ramon	Cal
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV., Adv. Pgs. 115, 231	Box 93, Ottawa, Ont	Can
Bio-Rad Laboratories	1257 S 32nd St, Richmond	Cal
Bios Laboratories, Inc.	17 W 60th St, New York 23	NY
California Corp for Biochemical Research	2025 Medford St. Los Angeles 63	Cal
ChemTrac Corp.	130 Alewife Brook Pkwy. Cambridge 40	Mass
D. I. S. I. Nuclear Corp.	Via A. Boccioni 20, Milan	Ital

ISOMET CORP., Adv Pg 94 ..... 455 Commercial Ave. Palisades Park ..... NJ
Isotopes Specialties Co. ..... Box 808, Burbank ..... Cal
Merck Sharp & Dohme of Canada Ltd. ..... 560 DeCourcelle St, Montreal 3 ..... P. Q.
New England Nuclear Corp. ..... 575 Albany St, Boston ..... Mass
Nichem Div. Nuclear Industries, Inc. ..... Box 8737, Bethesda 14 ..... Md
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),
Adv. Pgs. 217, 219, 221 ..... 1900 Warren St. Apollo ..... Pa
Nuclear Science & Engineering Corp. ..... Box 10901, Pittsburgh 36 ..... Pa
OAK RIDGE NATL LAB, ISOTOPES SALES DEPT.
Adv Pg 236 ..... Box X, Oak Ridge ..... Tenn
Quartz & Silica, S. A. ..... 8 rue d' Anjou, Paris ..... Fr
SHOWA DENKO K. K., Adv Pg 113-J ..... 34 Hisho Miyamoto-cho, Minato-ku, Tokyo ..... Jap
TERMINAL RADIO INTERNATIONAL LTD.
Adv Pg 113-C ..... 249 W 17th St. New York 11 ..... NY
TRACERLAB, INC. Adv. Pgs. 134, 113-S ..... 1601 Trapelo Rd. Waltham 54 ..... Mass
Wide Ranging Electronics Ltd. ..... King Henry's Dr, New Addington
Croydon, Surrey ..... Eng
U. S. NUCLEAR CORP., Adv Pg 127 ..... 801 N Lake St. Box 2002, Burbank ..... Cal
Volk Radiochemical Co. ..... 8260 Elmwood Ave, Skokie Ill
WEGA RESEARCH & DEVELOPMENT CO. LTD.
Adv Pg 231 ..... Rehovoth ..... Israel

ISOTOPES–STANDARDS, RADIOACTIVE
See SOURCES–RADIOACTIVE

LABORATORY APPARATUS
See Also BALANCES–WEIGHING
BATHS–CONSTANT-TEMPERATURE
BURETTES–AUTOMATIC
CENTRIFUGES
CHROMATOGRAPHIC APPARATUS
COLORIMETERS
CRYOGENIC APPARATUS
DENSITOMETERS
DESSICATORS
DRY BOXES
FUME HOODS
FURNACES–LABORATORY
FURNITURE–LABORATORY
GLASSWARE–LABORATORY
HOT LABORATORIES–NUCLEAR
LOW-TEMPERATURE APPARATUS
METALLOGRAPHIC APPARATUS
MICROCHEMICAL EQUIPMENT
OPTICAL INSTRUMENTS & PARTS
PHOTOMETERS
PIPETTES
STILLS–LABORATORY

Acme Electric Heating Corp. ..... 39 Reading St, Roxbury 19 ..... Mass
Air Control, Inc. ..... 460 Narberth Ave, Narberth ..... Pa
ALLIED ENGINEERING & PRODUCTION CORP.,
Adv Pg 242 ..... 2421 Blanding Ave. Alameda ..... Cal
Allied Research Associates, Inc. ..... 43 Leon St, Boston 15 ..... Mass
American Electronic Labs. ..... Colmar ..... Pa
American Instrument Co. Inc. ..... 8030 Georgia Ave, Silver Spring ..... Md
American Sterilizer Co. ..... Box 4350, Erie ..... Pa
Associated Testing Labs. Inc. ..... 104 Rt. 46, Wayne ..... NJ
Atomic Labs. Sub. Cenco ..... 1098 Claremont Ave, Berkeley 6 ..... Cal
Avsley Electric, Ltd. ..... 5, Ockendon, Essex, England
Baldwin Industrial Controls ..... Dartford, Kent ..... Eng
Barbier, Benard & Turenne, Anc. Ets. ..... 62 rue Cortot, Paris 18e ..... Fr
BARNSTEAD STILL & STERILIZER CO.
Adv Pg 210 ..... 64 Lanesville Ter. Boston 31 ..... Mass
Beckh & Lonik, Inc. ..... 18002 Ranch St, Rochester 3 ..... NY
Bendix Corp. Cincinnati Div. ..... 3130 Wasson Rd, Cincinnati 8 ..... Ohio
Bishop & Co., J., Platinum Works ..... Malvern ..... Pa
Bryans Aeroquipment Ltd. ..... Willow La. Mitcham, Surrey, England
Burrell Corp. ..... 2223 5th Ave, Pittsburgh 19 ..... Pa
California Corp for Biochemical Research ..... 3025 Medford St, Los Angeles 63 ..... Cal
CENTRAL SCIENTIFIC CO. Adv Pg 112 ..... 1700 Irving Park Rd. Chicago 13 Ill
Corning Glass Works, Shielding Radiation ..... Corning ..... NY
Dawes Co. ..... 500 W 6th, Pleasant Ave, Livingston ..... NJ
Degussa ..... Box 3003 Frankfurt/Main ..... Ger
Eberbach Corp. ..... Box 1086, Ann Arbor ..... Mich
EBERLINE INSTRUMENT CORP.
Adv Pg 115 ..... Box 279, Santa Fe ..... Mex
Engelhard Industries, Inc. ..... 113 Astor St, Newark 3 ..... NJ
Engis Equipment Co. ..... 431 S Dearborn St, Chicago Ill
Fielden Electronics Ltd. ..... Dalton Rd, Wythenshawe,
Manchester 23, England
Fischer & Porter Co. ..... 87 Warminster Rd, Warminster ..... Pa
FISH-SCHURMAN CORP. Adv Pg 234 ..... 70 Pyrmont Rd, New Rochelle ..... NY
Gaertner Scientific Corp. ..... 1227 Wrightwood Ave, Chicago Ill
Gallenkamp & Co. Ltd., A. ..... Sun St, London, E. C. 2, England
GELMAN INSTRUMENT CO. Adv Pg 233 ..... Box 1364, Chelsea ..... Mich
General Nuclear Corp. ..... 550-4 5th Ave, New York 36 ..... NY
General Scientific Equipment Co. ..... Lindrick & Williams, Philadelphia 36 ..... Pa
General Thermoelectric Corp. ..... Rinconada ..... NJ
Grieve-Hendry Co. Inc. ..... 1800 N Halsted Ave, Chicago 22 Ill
Hastings-Raydist Inc. ..... Newcomb Ave, Hampton ..... Va
Hevi-Duty Electric Co. Div. Basic
Products Corp. ..... 304 Hart St, Watertown ..... Wis
Honeywell Controls, Ltd. ..... Vanderhoof Ave, Toronto, Ont Canada
INSTRUMENTATION ASSOCIATES, INC.,
Adv Pg 226 ..... 17 W 60th St. New York 23 ..... NY
JENAER GLASWERKE SCHOTT & GEN.,
Adv Pg 112-B ..... 10 Hattenbergstr. Mainz/Rhein ..... W Ger
JOHNSON & ASSOCIATES, INC., WILLIAM B.,
Adv Pg 226 ..... Box 435, Mountain Lakes ..... NJ
Kahl Scientific Instrument Corp. ..... Box 1186, El Cajon ..... Cal
Laboratory Equipment Corp. ..... St. Joseph ..... Mich
Leeds & Northrup Co. ..... 4901 Stenton Ave, Phila 44 ..... Pa
L'Electronique Appliquee ..... 95 rue du Docteur Finlay, Paris 15, Fr
Lindberg Engineering Co. ..... 2450 W Hubbard St, Chicago 12 Ill
LINA MACHINE MFG. CO. INC.
Adv Pg 103 ..... 114 E 32nd St. New York ..... NY
Mason Laboratories, Inc. ..... 376 Fairfield Ave, Stamford ..... Conn
Medtronic Co. ..... 928 Pearson Plank Rd. E Rockaway ..... NJ
Mettler Instrument Corp. ..... Box 100, Princeton ..... NJ
Miles Hirsch Ltd ..... Old Shoreham Rd, Shoreham-by-Sea,
Sussex ..... Eng
Modern Lab. Equipment Co. Inc. ..... 1511 1st Ave. New York 28 ..... NY
Olson Filtration Engineers Div. Assoc. Ldry. Mach. Co.
5024 Section Ave, Cinc 13 ..... Ohio
Pall Corp. ..... Glen Cove ..... NY
Perkin-Elmer Corp. ..... Norwalk ..... Conn
RADIATION TECHNOLOGY, INC.
Adv. Pg. 3rd Cover ..... 687 Antone St. NW, Atlanta 18 ..... Ga
S. A. L. P. ..... 38 Rue Gabriel Crie, Malakoff, Seine ..... Fr
S.E.R.A.I., Adv Pg 113-J ..... 1091 chaussee d'Alsemberg, Brussels 18 ..... Belg
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229 ..... 23 Rd G. Clemenceau, Courbevoie, Seine ..... Fr
Scientific Glass Apparatus Co., Inc. ..... 100 Lakewood Terr, Bloomfield ..... NJ
Southwestern Engineering Co. ..... 4900 Santa Fe Ave, Los Angeles 58 ..... Cal
Staplex Co. Air Sampler Div. ..... 783 Fifth Ave, Brooklyn 32 ..... NY
STOKES CORP., F. J. Adv Pg 240 ..... 5000 Tabor Rd. Philadelphia 20 ..... Pa
Superior Electric Co., The ..... 383 Middle St, Bristol ..... Conn
SYSTEM ENGINEERING LAB. INC.
Adv Pg 190 ..... Box 9140, Fort Lauderdale ..... Fla
Tektronix, Inc. ..... Box 500, Beaverton ..... Ore
Telemechanism, Ltd. ..... Bedenfield Ln. Totton, Southampton ..... Eng
TERMINAL RADIO INTERNATIONAL LTD.
Adv Pg 113-C ..... 249 W 17th St. New York 11 ..... NY
Thomas Co., Arthur H. ..... Vine St at 3rd, Philadelphia 5 ..... Pa
TOKYO SHIBAURA ELECTRIC CO. LTD.
Adv Pg 225 ..... 72 Yanaka-cho 1-Chome, Chiyoda-ku,
Tokyo ..... Jap
Trans-Sonics, Inc. ..... Box 358, Lexington 73 ..... Mass
Vacuum Technology, Inc. ..... 7980 Gloria Ave. Van Nuys ..... Cal
WELCH SCIENTIFIC CO. Adv Pg 192 ..... 1515 Sedgwick St. Chicago 10 Ill
Will Corp. ..... Box 1060, Rochester 3 ..... NY

LABELED COMPOUNDS
See ISOTOPE-LABELED COMPOUNDS

LAUNDRY EQUIPMENT–CONTAMINATED CLOTHING

American Laundry Machinery Industries, ... Ave & Section Aves, Cincinnati 12 ..... Ohio
EBERLINE INSTRUMENT CORP.
Adv Pg 115 ..... Box 279, Santa Fe ..... Mex
Electronic Associates, Inc. ..... Long Branch ..... NJ
NUCLEONIC CORP. OF AMERICA,
Adv Pg 202 ..... 196 Degraw St. Brooklyn 31 ..... NY
PHILCO CORP. LANSDALE TUBE DIV.
Adv Pg 193 ..... Church Rd. Lansdale ..... Pa
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229 ..... 23 Rd G. Clemenceau, Courbevoie, Seine ..... Fr
TECHNICAL ASSOCIATES, Adv Pg 231 ..... 140 W Providencia Ave. Burbank ..... Cal

LAUNDRY SERVICES–CONTAMINATED CLOTHING
See SERV. & CONS'LT: LAUNDRY, CONTAMINATED

LEAD
See METALS, ALLOYS & COMPOUNDS
SHIELDING–RADIATION

LEAK TESTERS
See DETECTORS–LEAK

LEAK TESTING
See SERV. & CONS'LT: LEAK TESTING

LIGHT SOURCES–RADIOACTIVE

Barbier, Benard & Turenne, Anc. Ets. ..... 62 rue Cortot, Paris 18e ..... Fr
Fermont Electric, Inc ..... Industrial Pk. 81, Plainview ..... NY
Flight Refueling Inc. ..... Box 1701, Baltimore 3 ..... Md
Gates & Co. Inc., George W. ..... Hempstead Tpk. Dept. NSG,
Franklin Square ..... NY
General Electric Calculation Lamp Dept ..... Nela Park, Cleveland 12 ..... Ohio
Isotopes Specialties Co. ..... Box 808, Burbank ..... Cal
Mackay, Inc., A. B. ..... 198 Broadway, New York 38 ..... NY
New England Nuclear Corp. ..... 575 Albany St, Boston ..... Mass
Nuclear Research Associates, Inc. ..... 33-15 Hunters Pt. Ave. LIC 1 ..... NY
Nuclear Research Corp ..... Southampton ..... Pa
RADIUM CHEMICAL CO. INC. Adv Pg 12 ..... 161 E 42nd St. New York 17 ..... NY
TRC, Inc ..... 5 Aerial Way, Syosset ..... NY
U. S. NUCLEAR CORP., Adv Pg 127 ..... 801 N Lake St. Box 2002, Burbank ..... Cal
U. S. RADIUM CORP., Adv Pg 186 ..... Box 346, Hackettown ..... NJ

LIGHTING EQUIPMENT–UNDERWATER & HOT CELL

Barbier, Benard & Turenne, Anc. Ets. ..... 62 rue Cortot, Paris 18e ..... Fr
EDGERTON, GERMESHAUSEN & GRIER, INC.
Adv Pg 103 ..... 160 Brookline Ave. Boston 15 ..... Mass
LEMIX INSTRUMENT CO. Adv Pg 238 ..... 2810 Chancellor St. Philadelphia 3 ..... Pa
NERATOON, N. V., Adv Pg 113-F ..... Hoordeinde 30, The Hague ..... Neth
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 107 ..... Eindhoven ..... Neth
Research Equipment Co. ..... 502 Sunnyside, Wheaton Ill
TRC, Inc ..... 5 Aerial Way, Syosset ..... NY

LIQUEFIERS–GAS
See CRYOGENIC APPARATUS

LIQUID-LEVEL CONTROLS
See CONTROLS–LIQUID-LEVEL
INDICATORS–LIQUID-LEVEL

LIQUID METALS
See Specific Metal Under METALS, ALLOYS & COMPOUNDS

LOOPS–TEST, IN-PILE
See Also SERV. & CONS'LT: IN-PILE TEST DESIGN

AMF ATOMICS, Adv. Pgs. 76, 77, 99 ..... 140 Greenwich Ave. Greenwich ..... Conn
Atomics International Div. NAA Inc. ..... Box 309, Canoga Park ..... Cal
BABCOCK & WILCOX CO.
Adv. Pgs. 34, 35 ..... 161 E 42 St. New York 17 ..... NY
Babcock & Wilcox Ltd. ..... 209 Euston Rd, London NW 1, England
Canadian Westinghouse Co. Ltd. ..... Box 510, Hamilton, Ontario, Canada
De Havilland Engine Co. Ltd. ..... Stag Ln, Edgware, Middlesex ..... Eng
Flight Refueling Inc. ..... Box 1701, Baltimore 3 ..... Md
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.
Adv Pg 202 ..... Box 608, San Diego 12 ..... Cal
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 12 ..... 1 River Rd. Schenectady 5 ..... NY
HAZLETON-NUCLEAR SCIENCE CORP.
Adv Pg 30 ..... 4062 Fabian Way, Palo Alto ..... Cal
Hupco Div. Hoffman University-Industrial ..... Box 691, Pasco ..... Wash
INTERNUCLEAR CO., Adv Pg 240 ..... 7 N Brentwood Blvd. Clayton 5 ..... Mo
Lockheed Aircraft Corp. ..... Box 551, Burbank ..... Cal
Lockheed Aircraft Corp. Georgia Div. ..... 1800 Westside Dr. NW, Atlanta 18 ..... Ga
MIDWEST PIPING DIV. CRANE CO.
Adv Pg 193 ..... 1450 S Second St. St. Louis 4 ..... Mo
National Forge Co ..... Irvine, Warren City ..... Pa
NERATOON, N. V., Adv Pg 113-F ..... Hoordeinde 30, The Hague ..... Neth
Nuclear Science & Engineering Corp. ..... Box 10901, Pittsburgh 36 ..... Pa
Orenda Engines Ltd. ..... Box 6015 Town A, Toronto ..... Can
PACIFIC COAST ENGINEERING CO.
Adv Pg 200 ..... Drawer E, Alameda ..... Cal
Pittsburgh Piping & Equipment Co. ..... 158 40th St, Pittsburgh ..... Pa
Radiation Products, Inc. ..... PL 40 Rd, Flushing 52 ..... NY
S.E.R.A.I., Adv Pg 113-J ..... 1091 chaussee d'Alsemberg, Brussels 18 ..... Belg
SOCIETE RATEAU, Adv Pg 113-T ..... Rue Rateau La Courneuve, Seine ..... Fr
Tapco Div. Thompson Ramo Wooldridge
Inc. ..... 23555 Euclid Ave., Cleveland 17 ..... Ohio
UNITED NUCLEAR CORP., Adv Pg 38 ..... 563 Winchester Ave. New Haven 4 ..... Conn
Vickers-Armstrongs (S. Marston) Ltd. ..... Swindon, Wiltshire, England
WESTINGHOUSE TESTING REACTOR,
Adv. Pgs. 195 & 70, 71 ..... Box 1075, Pittsburgh 30 ..... Pa

LOOPS–TEST, OUT-OF-PILE

AMF ATOMICS, Adv. Pgs. 76, 77, 99 ..... 140 Greenwich Ave. Greenwich ..... Conn
Alco Products, Inc. ..... Box 1085, Schenectady 5 ..... NY
Alsthom, Nuclear Div. ..... 38, Ave. Kleber, Paris 16, France
BABCOCK & WILCOX CO.
Adv. Pgs. 34, 35 ..... 161 E 42 St. New York 17 ..... NY
Babcock & Wilcox Ltd. ..... 209 Euston Rd, London NW 1, England
Brenkey, Hopf & Adler ..... 220 E 23rd St, New York 10 ..... NY
Canadian Westinghouse Co. Ltd. ..... Box 510, Hamilton, Ontario, Canada
Combustion Engineering, Inc. ..... 200 Madison Ave. New York 16 ..... NY
De Havilland Engine Co. Ltd. ..... Stag Ln, Edgware, Middlesex ..... Eng
Flight Refueling Inc. ..... Box 1701, Baltimore 3 ..... Md
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.
Adv Pg 202 ..... Box 608, San Diego 12 ..... Cal
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 12 ..... 1 River Rd. Schenectady 5 ..... NY
HAZLETON-NUCLEAR SCIENCE CORP.
Adv Pg 30 ..... 4062 Fabian Way, Palo Alto ..... Cal
Hupco Div. Hoffman University-Industrial ..... Box 691, Pasco ..... Wash
INTERNUCLEAR CO., Adv Pg 240 ..... 7 N Brentwood Blvd. Clayton 5 ..... Mo
Kelley & Co., Q. G. ..... 96 Taylor St, Boston 20 ..... Mass
Liquid Metals, Inc. ..... Box 2002, Wentford ..... Mass
Lockheed Aircraft Corp. ..... Box 551, Burbank ..... Cal
Lockheed Aircraft Corp. Georgia Div. ..... 1800 Westside Dr. NW, Atlanta 18 ..... Ga
Marquardt Corp. ..... 16555 Saticoy St. Van Nuys ..... Cal
MIDWEST PIPING DIV. CRANE CO.
Adv Pg 193 ..... 1450 S Second St. St. Louis 4 ..... Mo
National Forge Co ..... Irvine, Warren City ..... Pa
NERATOON, N. V., Adv Pg 113-F ..... Hoordeinde 30, The Hague ..... Neth
Nuclear Science & Engineering Corp. ..... Box 10901, Pittsburgh 36 ..... Pa
Orenda Engines Ltd. ..... Box 6015 Town A, Toronto ..... Can
PACIFIC COAST ENGINEERING CO.
Adv Pg 200 ..... Drawer E, Alameda ..... Cal
Pittsburgh Piping & Equipment Co. ..... 158 40th St, Pittsburgh ..... Pa
Radiation Products, Inc. ..... PL 40 Rd, Flushing 52 ..... NY
S.E.R.A.I., Adv Pg 113-J ..... 1091 chaussee d'Alsemberg, Brussels 18 ..... Belg
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229 ..... 23 Rd G. Clemenceau, Courbevoie, Seine ..... Fr
SOCIETE RATEAU, Adv Pg 113-T ..... Rue Rateau La Courneuve, Seine ..... Fr
Sulzer Bros. Ltd. ..... Winterthur ..... Swit

UNITED NUCLEAR CORP., Adv Pg 36	383 Winchester Ave. New Haven 4	Conn
Vickers-Armstrongs (S. Marston) Ltd.	Swindon, Wiltshire, England	

LOW-TEMPERATURE APPARATUS
See CRYOGENIC APPARATUS

LUBRICANTS

Acheson Colloids Co.	1636 Washington Ave. Port Huron	Mich
Alpha Molykote Corp.	65 Harvard Ave. Stamford	Conn
CRAWFORD FITTING CO. Adv Pg 53	884 E 140 St. Cleveland 10	Ohio
De Alli Co.	1054 N Laurel Ave. Des Plaines	Ill
Dow Corning Corp.	Midland	Mich
Huron Industries	Box 196, Port Huron	Mich
Kessler Chemical Co. Inc.	Trenton Rd. & Commun Ave. Philadelphia 26	Pa
Memorial Service Div. Gen Dynamics Corp	500 W Washington St. Chicago 6	Ill
Mobil Oil Co.	150 E 42nd St. New York	NY
Silicones Div. Union Carbide Corp.	270 Park Ave. New York 17	NY
Union Carbide Chemicals Co. Div. UCC	270 Park Ave. New York 17	NY

LUBRICANTS-RADIATION-RESISTANT

Huron Industries	Box 196, Port Huron	Mich
Mobil Oil Co.	150 E 42nd St. New York	NY
TELEFLEX INC. Adv Pg 240	Church Rd. North Wales	Pa

MACHINE TOOLS
See FABRICATING EQUIPMENT

MACHINE TOOLS-REMOTELY CONTROLLED
See Under FABRICATING EQUIPMENT

MACHINES-FABRICATION
See Under FABRICATING EQUIPMENT

MAGNETIC MATERIALS

Allegheny Ludlum Steel Corp.	Oliver Bldg. Pittsburgh 22	Pa
Allen-Bradley Co.	136 W Greenfield Ave. Milwaukee 4	Wis
Arnold Engineering Co.	Box G. Marengo	Ill
Cambridge Thermionic Corp.	446 Concord Ave. Cambridge 38	Mass
FERRAPERTY DIV. GEN. PRECISION, INC.		
Adv Pg 220	1150 McBride Ave. Little Falls	NJ
Mackay, Inc., A. B.	100 Broadway, New York 38	NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC		
Adv Pg 2	Box 888, Attleboro	Mass
National Moldite Co. Inc.	200 South St. Newark 5	NJ
PHILIPS' GLOEILAMPENFABRIEKEN, N.V.		
Adv Pg 187	Eindhoven	Neth
Polymer Corp.	5230 Paxtonent, Reading	Pa
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
Stackpole Carbon Co.	St. Marys	Pa
Standard Tel. & Cables Ltd.	29 Glasshouse Yd. London EC 1	Eng
Steward Mfg. Co., D. M.	E 88 St. Chattanooga 1	Tenn
TOKYO SHIBAURA ELECTRIC CO. LTD.	12 Tsunko-cho 1-Chome, Chiyoda-ku,	
Adv Pg 225	Tokyo	Jap
Universal Cyclops Steel Corp.	Bridgeville	Pa
WESTINGHOUSE ELEC. CORP. MATERIALS MFG.		
Adv. Pgs. 70, 71	Blairsville	Pa

MAGNETIC-TAPE RECORDERS
See RECORDERS

MAGNETS

AEG, Adv Pg 113-A	Nuernberg, Frankfurt/Main, Germany	
AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
Allen-Bradley Co.	136 W Greenfield Ave. Milwaukee 4	Wis
Allevard-Ugine	15 rue de Rochor, Paris 8, France	
Arnold Engineering Co.	Box G. Marengo	Ill
Atomic Labs Sub. Cenco	3008 Claremont Ave. Berkeley 5	Cal
Barber Sales Co.	300 S Broad Ave. Ridgefield	NJ
British Electrical Repairs Ltd.	10 Charlotte St. Manchester 1, Eng	
Crucible Steel Co. of America	Box 88, Pittsburgh 30	Pa
Cutler-Hammer, Inc.	412 N 12th St. Milwaukee 1	Wis
Electroimpe Mess Ste d'	11 rue Petit, Chilly Seine	Fr
English Steel Corp. Ltd. Steer Dev Wks.	Sheffield 9, Yorkshire, England	
Forges & Ateliers de Com. Electriques de Jeumont	5 pl. Rio-de-Janeiro, Paris 8e	Fr
General Electric Co. Ltd. of England	Erith, Kent, England	
General Scientific Equipment Co.	Limekiln & Williams, Philadelphia 50	Pa
HARVEY-WELLS NUCLEAR CORP.		
Adv Pg 201	42 Kendall St. Framingham	Mass
HIGH VOLTAGE ENGINEERING CORP.		
Adv Pg 179	5 Bedford St. Burlington	Mass
Laboratory for Science	5451 College Ave. Oakland 18	Cal
L'Electronique Appliquee	26 rue de Docteur Finlay, Paris 15	Fr
National Moldite Co. Inc.	200 South St. Newark 6	NJ
Newport Instruments (Scientific & Medical) Ltd.	Crawley Rd. Newport Pagnell, Bucks, Eng	
Permag Corp.	80-06 Van Wyck Expwy. Jamaica 18	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N.V.		
Adv Pg 187	Eindhoven	Neth
Process & Instruments Corp.	15 Stone Ave. Brooklyn 33	NY
Spectromagnetic Industries	Box 3306, Hayward	Cal
Stackpole Carbon Co.	St. Marys	Pa
Steward Mfg. Co., D. M.	E 36 St. Chattanooga 1	Tenn
TELEFLEX INC. Adv Pg 243	Church Rd. North Wales	Pa
TOKYO SHIBAURA ELECTRIC CO. LTD.	12 Tsunko-cho 1-Chome, Chiyoda-ku,	
Adv Pg 225	Tokyo	Jap
Trent Tube Co	East Troy	Wis
WESTINGHOUSE ELEC. CORP. MATERIALS MFG.		
Adv. Pgs. 70, 71	Blairsville	Pa

MANAGEMENT ECONOMICS CONSULTING
See SERV. & CONS'LT: MANAGEMENT ECONOMICS CONSULTING

MANIPULATORS-REMOTE

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
ALLIED ENGINEERING & PRODUCTION CORP.		
Adv Pg 242	3421 Blending Ave. Alameda	Cal
AMERAY CORP., Adv Pg 113	Route 46, Kenvil	NJ
Atomic Devel. & Machine Corp.	16-04 130 St. College Point 56	NY
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Barnes Co., W. F. & John	301 S Water St. Rockford	Ill
Buchler & Co.	Frankfurter Str. 294 Braunschweig, Ger	
Carter & Viner	Cooden Sea Rd. Bexhill, Sussex, Eng	
Cayuga Machine & Fabricating Co. Inc.	200 W Gould Ave. Depew	NY
CENTRAL RESEARCH LABORATORIES, INC.		
Adv. Pgs. 38, 39	Red Wing	Minn
Consolidated Controls Corp.	14 Durant Ave. Bethel	Conn
DIAMOND POWER SPECIALTY CORP.		
Adv Pg 1	Box 415, Lancaster	Ohio
Evans & Son (Portsmouth) Ltd., L.	Marcyn Wks. Goldsmith Ave. Portsmouth, Hants, Eng	
EX-CELLO CORP. ATOMICS DIV.		
Adv. Pgs. 8, 9	1200 Dalman Blvd. Detroit 32	Mich
Farrel-Birmingham Co. Inc.	Ansonia	Conn
GENERAL MILLS INC. ELECTRONIC GR. AUTOMATIC HANDLING EQUIP. DEPT. Adv Pg 17	419 N 5th St. Minneapolis 1	Minn
Hitachi, Ltd.	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
HUGHES AIRCRAFT CO. NUCLEONICS LAB.		
Adv Pg 203	Box 3997, Fullerton	Cal
KEWAUNEE SCIENTIFIC EQUIPMENT,		
Adv Pg 136	4842 Logan St. Adrian	Mich
Lee Associates, Inc.	416 McCarty Bldg. Boise	Idaho
Malmier Lab Inc	191 Mill Lane, Mountainside	NJ
NUCLEAR ENGINEERING CO. INC.,		
Adv Pg 119	65 Bay St. Box 218, Pleasanton	Cal
Nuclear Research Applications Ltd.	Bell St. Reigate, Surrey, England	
Perkin-Elmer Corp. Electro-Optical Div.	5670 E Washington Blvd. L A 22	Cal
Pye, Ltd	St. Andrews Rd. Cambridge	Eng
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	663 Hertick Rd. Lynbrook	NY
RUCKER CO., THE, Adv Pg 187	4700 San Pablo Ave. Oakland 8	Cal
S. O. M.	155 bd Devout, Paris 20	Fr
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Stewart Iron Machinery Corp.		
Atomic Power Dept.	Balch St. Beverly	Mass
U. S. NUCLEAR CORP., Adv Pg 127	801 N Lake St. Box 2022, Burbank	Cal

MANIPULATORS-REMOTE, HEAVY-DUTY

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
ALLIED ENGINEERING & PRODUCTION CORP.		
Adv Pg 242	3421 Blending Ave. Alameda	Cal
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Baldwin-Lima-Hamilton Corp.	Dept N 8, Philadelphia 42	Pa
Barnes Co., W. F. & John	301 S Water St. Rockford	Ill
Cayuga Machine & Fabricating Co. Inc.	200 W Gould Ave. Depew	NY
CENTRAL RESEARCH LABORATORIES, INC.		
Adv. Pgs. 38, 39	Red Wing	Minn
DIAMOND POWER SPECIALTY CORP.		
Adv Pg 1	Box 415, Lancaster	Ohio
Electricite Mess Ste d'	11 rue Petit, Chilly Seine	Fr
Evans & Son (Portsmouth) Ltd., L.	Marcyn Wks. Goldsmith Ave. Portsmouth, Hants, Eng	
EX-CELLO CORP. ATOMICS DIV.		
Adv. Pgs. 8, 9	1200 Dalman Blvd. Detroit 32	Mich
FMC Corp. Ordnance Div.	Box 367, San Jose 8	Cal
Farrel-Birmingham Co. Inc.	Ansonia	Conn
General Electric Co. Ltd. of England	Erith, Kent, England	
GENERAL MILLS INC. ELECTRONIC GR. AUTOMATIC HANDLING EQUIP. DEPT. Adv Pg 17	419 N 5th St. Minneapolis 1	Minn
HUGHES AIRCRAFT CO. NUCLEONICS LAB.		
Adv Pg 203	Box 3997, Fullerton	Cal
Malmier Lab Inc	191 Mill Lane, Mountainside	NJ
Pye, Ltd	St. Andrews Rd. Cambridge	Eng
RUCKER CO., THE, Adv Pg 187	4700 San Pablo Ave. Oakland 8	Cal
S. O. M.	155 bd Devout, Paris 20	Fr
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr

MANOMETERS
See GAGES-PRESSURE

MANUFACTURERS REPRESENTATIVES

Only manufacturers representatives featuring advertisement in the DISPLAY ADVERTISING SECTION appear in the following list:

EDWARDS, A. BRUCE, Adv Pg 7	1 Belmont Ave. Bala-Cynwyd	Pa
PACKARD INSTRUMENT CO. INC.		
Adv. Pgs. 62, 63	Box 428, La Grange	Ill

MASKS-PROTECTIVE

American Optical Co. Safety Prods. Div.	20 Mechanic St. Southbridge	Mass
Bullard Co. E. D.	2680 Bridgeway, Sausalito	Cal
De Vilbiss Co.	300 Phillips Ave. Toledo 1	Ohio
Eastwood Plastics, Ltd. Priory Wks.	Arnold Rd. Leigh-on-Sea, Essex	Eng
General Scientific Equipment Co.	Limekiln & Williams, Philadelphia 50	Pa
Morris, Ltd., B. O.	Brinn Rd. Coventry	Eng
Nuclear Decontamination Corp	110 Warren St. Apollo	Pa
NUCLEAR ENGINEERING CO. INC.,		
Adv Pg 119	65 Bay St. Box 218, Pleasanton	Cal
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	663 Hertick Rd. Lynbrook	NY
Snyder Mfg. Co. Inc.	Box 664, New Philadelphia	Ohio
Standard Safety Equipment Co.	631 N Quentin Rd. Palatine	Ill

MATERIALS-HANDLING EQUIPMENT

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
ALLIED ENGINEERING & PRODUCTION CORP.,		
Adv Pg 242	3421 Blending Ave. Alameda	Cal
Armstrong Whitworth Equipment	Hucclecote, Gloucester	Eng
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Babcock & Wilcox Ltd.	209 Euston Rd. London NW 1, England	
Baldwin-Lima-Hamilton Corp.	Dept N 8, Philadelphia 42	Pa
Barnes Co., W. F. & John	301 S Water St. Rockford	Ill
Barnes & Reinecke, Inc.	230 E Ohio St. Chicago 11	Ill
British Electrical Repairs Ltd.	10 Charlotte St. Manchester 1, Eng	
BRUCKS & PERKINS, Adv Pg 114	7920 W Fort St. Detroit 16	Mich
Buchler & Co.	Frankfurter Str. 294 Braunschweig, Ger	
Cayuga Machine & Fabricating Co. Inc.	200 W Gould Ave. Depew	NY
CENTRAL RESEARCH LABORATORIES, INC.		
Adv. Pgs. 38, 39	Red Wing	Minn
Cutler-Hammer, Inc.	412 N 12th St. Milwaukee 1	Wis
DIAMOND POWER SPECIALTY CORP.		
Adv Pg 1	Box 415, Lancaster	Ohio
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 600, Groton	Conn
EX-CELLO CORP. ATOMICS DIV.		
Adv. Pgs. 8, 9	1200 Dalman Blvd. Detroit 32	Mich
Factory Service Co.	6611 N 91 St. Milwaukee 9	Wis
Fairbanks Co., The	380 Lafayette St. New York 3	NY
Flight Refueling Inc.	Box 1701, Baltimore 7	Md
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 12	1 River Rd. Schenectady 5	NY
General Electric Co. Ltd. of England	Erith, Kent, England	
Ingersoll-Rand Co.	11 Broadway, New York 4	NY
Isotopes Specialties Co.	Box 808, Burbank	Cal
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
Pye, Ltd	St. Andrews Rd. Cambridge	Eng
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	663 Hertick Rd. Lynbrook	NY
Republic Steel Corp.	1441 Republic Bldg. Cleveland 1	Ohio
Robbins & Myers, Inc.	1366 Legonda Ave. Springfield	Ohio
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Salem-Brosius Inc.	Box 2222, Pittsburgh 30	Pa
Stewart Iron Machinery Corp.		
Atomic Power Dept.	Balch St. Beverly	Mass
Wallace & Tiernan, Inc.	25 Main St. Belleville 9	NJ
Whiting Corp.	157 & Ladrop Sts. Harvey	Ill

MATERIALS-HANDLING EQUIPMENT-REMOTE
See Also MANIPULATORS-REMOTE
TONGS-HANDLING
SERV. & CONS'LT: MATERIALS, HANDLING

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
Acoms Div Aerojet-General Corp	410 N Citrus Ave. Covina	Cal
ALLIED ENGINEERING & PRODUCTION CORP.,		
Adv Pg 242	3421 Blending Ave. Alameda	Cal
AMERAY CORP., Adv Pg 113	Route 46, Kenvil	NJ
ATOMIC ACCESSORIES, INC., Adv Pg 286	811 N Martindale Rd. Valley Stream	NY
Automotive & Aircraft Div. Assoc.		
Chain & Cable Co. Inc.	801 Stephenson Bldg. Detroit	Mich
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Baldwin-Lima-Hamilton Corp.	Dept N 8, Philadelphia 42	Pa
Berkley & Dexter Labs. Inc.	50 Fountain St. Worcester	Mass
Barnes Co., W. F. & John	301 S Water St. Rockford	Ill
Barnes & Reinecke, Inc.	230 E Ohio St. Chicago 11	Ill
Beatrick Associates, Inc	138 E 32nd St. New York 22	NY
British Electrical Repairs Ltd.	10 Charlotte St. Manchester 1, Eng	
Buchler & Co.	Frankfurter Str. 294 Braunschweig, Ger	
Cayuga Machine & Fabricating Co. Inc.	200 W Gould Ave. Depew	NY
CENTRAL RESEARCH LABORATORIES, INC.		
Adv. Pgs. 38, 39	Red Wing	Minn
Consolidated Controls Corp.	14 Durant Ave. Bethel	Conn
Cutler-Hammer, Inc.	412 N 12th St. Milwaukee 1	Wis
DIAMOND POWER SPECIALTY CORP.		
Adv Pg 1	Box 415, Lancaster	Ohio
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 600, Groton	Conn

Electronics Mon Ste S'	11 rue Petit, Clichy Seine	Fr
Evans & Son (Portsmouth) Ltd., L.		
Marcys Wks.	Coldnutt Ave, Portsmouth, Hants, Eng	
EX-CELLO CORP. ATOMICS DIV.		
Adv. Pgs. 8, 9	1200 Solomon Blvd. Detroit 22	Mich
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
GENERAL ELECTRIC CO. APPARATUS SALES.		
Adv. Pgs. 11, 12	1 River Rd. Schenectady 5	NY
General Electric Co. Ltd. of England	Hirst, Kent, England	
GENERAL MILLS INC. ELECTRONIC OR. AUTOMATIC		
HANDLING EQUIP. DEPT. Adv Pg 17	409 N 5th St. Minneapolis 1	Minn
Harry Co., Inc., R. V.	1488 Sloman Ave. Detroit 11	Mich
HUGHES AIRCRAFT CO. NUCLEONICS LAB.		
Adv Pg 285	Box 2097, Fullerton	Cal
Liquid Metals, Inc.	Box 2001, Westford	Mass
Lockheed Aircraft Corp.	Box 551, Burbank	Cal
Metalizer Labs Inc	191 Mill Lane, Moonstonside	NJ
NUCLEAR ENTERPRISES LTD.,		
Adv Pg 194	550 Berry St. Winnipeg 21	Man
PACIFIC COAST ENGINEERING CO.		
Adv Pg 200	Hower E, Alameda	Cal
Pye, Ltd	St. Andrews Rd, Cambridge	Eng
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	465 Merrick Rd. Lynbrook	NY
Radiation Products, Inc.	Pl. 40 Rd, Flushing 52	NY
RUCKER CO., THE, Adv Pg 197	4700 San Pablo Ave. Oakland	Cal
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	22 Rd G. Clemenceau, Courbevoie, Seine	Fr
Salem-Brosius Inc.	Box 12222, Pittsburgh 30	Pa
Standard Tel. & Cables Ltd.	20 Glasshouse Yd, London EC 1	Eng
United Nuc Machinery Corp. Atomic		
Power Dept.	Balch St, Beverly	Mass
Whiting Corp.	157 A Lathrop Sta. Harvey	Ill

MATERIALS, NONMETAL —RESEARCH & DEVELOPMENT

See SERV. & CONS'LT: MATERIALS, NONMETAL

MATERIALS-TESTING APPARATUS

See Also HARDNESS TESTERS
STRESS-ANALYSIS EQUIPMENT

American Instrument Co. Inc.	8030 Georgia Ave, Silver Spring	Md
Associated Research, Inc.	3700 W Belmont Ave, Chicago 18	Ill
Baldwin-Lima-Hamilton Corp.	Dept N 8, Philadelphia 42	Pa
Barnes Development Co.	213 W Baltimore Pike, Lansdowne	Pa
Barnes & Reinecke, Inc.	220 E Ohio St, Chicago 11	Ill
Bausch & Lomb, Inc.	8000 Bausch St, Rochester 2	NY
Cawkell Research & Electronics Ltd.	Scotts Rd, Southall, Middx.	Eng
CENTRAL SCIENTIFIC CO. Adv Pg 112	1700 Irving Park Rd. Chicago 13	Ill
Cook Electric Co. Hook Pack Cir.	6601 W Oakton St, Morton Grove	Ill
Custom Scientific Instruments Inc.	541 Devon St. Kearny	NJ
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept, 000, Groton	Conn
EX-CELLO CORP. ATOMICS DIV.		
Adv. Pgs. 8, 9	1200 Solomon Blvd. Detroit 32	Mich
Falk & Co. Ltd., M.	Knowles House, Reigate, Surrey, Eng	
Fourne Transformers Ltd.	5 Wimbledon Mansions Rd. London SW18	Eng
GENERAL ATOMIC DIV. GEN DYNAMICS CORP.		
Adv Pg 202	Box 608, San Diego 12	Cal
Horton Engineering Corp.	2600 Washington St. Canton	Mass
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
Pneumatrol Ltd.	5A Princes St, Hanover Sq, London W1, Eng	
Plasmadyne Corp.	3839 S Main St. Santa Ana	Cal
Pye, Ltd	St. Andrews Rd, Cambridge	Eng
Rose Engineering, Inc.	A & Courtland, Philadelphia 20	Pa
Sasserch Inc.	Box 6184, Edina Sta, Minpls 24	Minn
ROYAL RESEARCH CORP. Adv Pg 21	11824 Dublin Blvd. Hayward	Cal
Sirex Testing Lab. Inc	227 Knowlton St, Bridgeport 8	Conn
Thermal-Dynamics Corp.	Lebanon	Ill

MATRIX MATERIALS

See FUEL ELEMENTS
METALS, ALLOYS & COMPOUNDS

NEGOMMETERS

See Also OHMMETERS

AEG, Adv Pg 112-A	Hochhaus, Frankfurt/Main, Germany	
Associated Research, Inc.	3700 W Belmont Ave, Chicago 18	Ill
Avelay Electric, Ltd.	S. Ockendon, Essex, England	
Biddle Co., James G.	1316 Arch St, Philadelphia 7	Pa
Brael & Kjaer	Lindo Allé 22, Naerum, Den	
Evershed & Vignoles, Ltd. Acton Lane		
Wks.	Chiswick, London W4	Eng
Fried Transformer Co., Inc.	1718 Weirfield St, Brooklyn 27	NY
General Radio Co.	West Concord	Mass
Helex Inc.	200 E Imperial Hwy, El Segundo	Cal
Hewlett-Packard Co.	1501 Page Mill Rd, Palo Alto	Cal
Kahl Scientific Instrument Corp.	Box 1108, El Cajon	Cal
LANDEVERK ELECTROMETER CO.		
Adv Pg 270	647 Tamara Ave. Glendale 7	Cal
Leeds & Northrup Co.	4901 Stenton Ave, Phila 44	Pa
Mid-Eastern Electronics, Inc.	32 Commerce St, Springfield	NJ
Miles Hivolt Ltd	Old Shoreham Rd, Shoreham-by-Sea,	
	Sussex	Eng
Minneapolis Instruments Inc.	461 Lexington Ave. New York 17	NY
New London Instrument Co. Inc.	80 Union St, New London	Conn
Physics Research Labs, Inc.	Box 666, Hempstead	NY
Pye & Co. Ltd., W. G.	York St. Cambridge	Eng
Siemens & Halske AG	Hochstadtstrasse, 50, Karlsruhe, Germany	
Simpson Electric Co. Div. Amer. Gage &		
Mach Co.	5200 W Kinzie St, Chicago 44	Ill
Smith-Florence, Inc.	Overlake Ind. Pk. Box 717, Redmond	Wash
TOKYO SHIBAURA ELECTRIC CO. LTD.	12 Yoshi-cho 1-Chome, Chiyoda-ku,	
Adv Pg 235	Tokyo	Jap

METAL FABRICATORS

See SERV. & CONS'LT: METAL FABRICATION-FERROUS
SERV. & CONS'LT: METAL FABRICATION-NONFERROUS
SERV. & CONS'LT: METAL FABRICATION-SPECIAL SHAPES

METALLOGRAPHIC EQUIPMENT

Alloys Research & Mfg. Corp.	34-32 57th St. Woodside 77	NY
Bausch & Lomb, Inc.	80000 Bausch St, Rochester 2	NY
CENTRAL SCIENTIFIC CO. Adv Pg 112	1700 Irving Park Rd. Chicago 13	Ill
Dental Fillings Ltd.	48, Clayting Rd. London N16, England	
Emma Corp. Scientific Instruments Div.	18 W 40th St. New York 18	NY
Herbert & Co. Inc., William J.	Box 840, W Caldwell	NJ
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
National Instrument Labs. Inc.	848 Evarts St. NE, Washington	DC
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),		
Adv. Pgs. 217, 219, 221	1000 Warren St. Apollo	Pa
Pneumatrol Ltd.	5A Princes St, Hanover Sq, London W1, Eng	
Purdue-Elmer Corp. Electro-Optical Div.	6070 E Washington Blvd. L A 22	Cal
Schoen Scientific Div. Schoeler & Co.	75 Cliff St, New York 38	NY
Siemens & Halske AG	Rheinbrückenstr. 50, Karlsruhe	Ger
Will Corp.	Box 1050, Rochester 3	NY

METALLURGICAL

See SERV. & CONS'LT: METALLURGICAL

METALS, ALLOYS & COMPOUNDS (Including RARE EARTHS)

See Also CASTINGS
FORGINGS
FUEL ELEMENTS
METALS—HIGH-DENSITY ALLOY, —LAMINATED,
—POWDERED AND VACUUM-MELTED
PIPE & TUBING

ALUMINUM

Alloys Research & Mfg. Corp.	34-32 57th St. Woodside 77	NY
Alloys Unlimited, Inc.	52-01 43rd Ave, LIC 1	NY
Alpha Metals, Inc.	600 Water St, Jersey City 4	NJ
Aluminum Co. of America	1501 Alcoa Bldg, Pittsburgh 19	Pa
AMERICAN SMELTING & REFINING CO.,		
Adv Pg 67	120 Broadway, New York 5	NY
Belmont Smelting & Refining Wrks, Inc.	252 Belmont Ave, Brooklyn 7	NY
Bion Laboratories, Inc.	17 W 60th St, New York 23	NY
Bridgeport Brass Co.	30 Grand St, Bridgeport 2	Conn
BROOKS & PERKINS, Adv Pg 114	1900 W Fort St, Detroit 26	Mich
Chase Brass & Copper Co.	236 Grand St, Waterbury	Conn
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 288	Great Barrington	Mass
Fischel Co., Ernest L.	100 Broadway, New York 30	NY
FLOWLINE CORP. Adv Pg 190	New Castle	Pa
General Automatic Corp.	250 Tonhan Ave, Yonkers 2	NY
HARVEY ALUMINUM, Adv Pg 59	19200 S Western Ave, Torrance	Cal
Kawecki Chemical Co. Inc.	220 E 42nd St, New York	NY
Mallinckrodt Chemical Works	2nd & Mallinckrodt Sts, St. Louis 7	Mo
NATIONAL LEAD CO. Adv. Pgs. 60, 61	111 Broadway, New York 6	NY
Nuclear Metals, Inc.	Box 332 Concord	Mass
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, Seine	Fr
PRECISION EXTRUSIONS INC.		
Adv Pg 93	720 E Green Ave. Bensenville	Ill
Reactor Materials Inc.	Box 478, Pennsville	NY
Reliance Incorporated	1210-1213 Adams Ave, Phila 24	Pa
Revere Copper & Brass, Inc.	230 Park Ave, New York 17	NY
Reynolds Metals Co.	Box 2346, Richmond 18	Va
Scovill Mfg. Co. Mills Div.	99 Mill St, Waterbury 20	Conn
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
SHOWA DENKO K. K., Adv Pg 113-G	34 Shiba Miyamoto-cho, Minato-ku, Tokyo	Jap
Simonini Div. Chemalloy Div.	180 Warren Hwy. West Nyack	NY
SYLCOR DIV. SYLVANIA ELEC PROD. INC.		
Adv Pg 26	Centerpoint Rock Rd. Hicksville	NY
Torrance Bros Foundry, Inc	1825 W 213th St, Torrance	Cal
Tube Investments Ltd.	Aston Manor, Birmingham 6	Eng
USINE, Adv Pg 112-P	10 rue du General Foy, Paris 8	Fr
UNITED NUCLEAR CORP., Adv Pg 36	265 Winchester Ave. New Haven 4	Conn
Vanadium Corp. of America	420 Lexington Ave. New York 17	NY
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St. New York 4	NY
VIENER & SONS, HYMAN, Adv Pg 64	5300 Hatcher St. Box 372, Richmond 5	Va
Waukesha Foundry Co.	Lincoln Ave. Waukesha	Wis

ANTIMONY

Alloys Unlimited, Inc.	52-01 43rd Ave, LIC 1	NY
AMERICAN SMELTING & REFINING CO.,		
Adv Pg 67	120 Broadway, New York 5	NY
Burton & Chemicals, Inc.	4943 Erie St. Willoughby	Ohio
Belmont Smelting & Refining Wrks, Inc.	252 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	659 64th Ave. Philadelphia 26	Pa
City Chemical Corp.	132 W 22nd St. New York 11	NY
Degussa	Box 2001 Frankfurt/Main	Ger
Delta Chemical Works	23 W 60 St. New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 288	Great Barrington	Mass
Federated Metals Canada Ltd.	1400 Norman St. Lachine	Que
Fischel Co., Ernest L.	100 Broadway, New York 30	NY
LEAD PRODUCTS, INC. Adv Pg 228	Hartford Rd. Manchester	Conn
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Mallinckrodt Chemical Works	2nd & Mallinckrodt Sts, St. Louis 7	Mo
NATIONAL LEAD CO. Adv. Pgs. 60, 61	111 Broadway, New York 6	NY
NUCLEAD, INC., Adv Pg 230	110 Pacific St. Cambridge	Mass
Ohio Semiconductors, Inc.	1206 Chesapeake Ave. Columbus 12	Ohio
Reliance Incorporated	1210-1213 Adams Ave, Phila 24	Pa
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St. New York 4	NY
VIENER & SONS, HYMAN, Adv Pg 64	5300 Hatcher St. Box 372, Richmond 5	Va
Western Gold & Platinum Co.	555 Harbor Blvd, Belmont	Cal

BARIUM

Burton & Chemicals, Inc.	4943 Erie St. Willoughby	Ohio
Bram Metallurgical-Chemical Co.	659 64th Ave. Philadelphia 26	Pa
City Chemical Corp.	132 W 22nd St. New York 11	NY
Degussa	Box 2001 Frankfurt/Main	Ger
Delta Chemical Works	23 W 60 St. New York 23	NY
King Laboratories, Inc.	127 Cedar St, Syracuse 3	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Nuclear Fuels & Rare Metals Corp.	817 E 20th St. LA 21	Cal
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St. New York 4	NY

BERYLLIUM

Belmont Smelting & Refining Wrks, Inc.	252 Belmont Ave, Brooklyn 7	NY
Beryllium Corp.	Box 1462, Reading	Pa
Beryllium Smelting Co. Ltd.	30-38 Southampton St, London WC 2	Eng
Bram Metallurgical-Chemical Co.	659 64th Ave. Philadelphia 26	Pa
Bridgeport Brass Co.	30 Grand St, Bridgeport 2	Conn
Brush Beryllium Co.	1000 Euclid Ave. Cleveland 3	Ohio
Chicago Development Corp.	3835 47th Ave. Riverdale	Md
City Chemical Corp.	132 W 22nd St. New York 11	NY
Degussa	Box 2001 Frankfurt/Main	Ger
Delta Chemical Works	23 W 60 St. New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 288	Great Barrington	Mass
Engelhard Industries, Inc.	113 Astor St, Newark 5	NJ
General Automatic Corp.	250 Tonhan Ave, Yonkers 2	NY
Job-O-Steinbeck	Reinbek, Bz. Hmb, Germany	
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.		
Adv Pg 3	Box 840, Attleboro	Mass
MINERAL CONCENTRATES & CHEMICAL CO. INC.		
Adv Pg 21	Box 180, Loveland	Colo
Nuclear Fuels & Rare Metals Corp.	817 E 20th St, LA 21	Cal
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),		
Adv. Pgs. 217, 219, 221	1000 Warren St. Apollo	Pa
Nuclear Metals, Inc.	Box 332 Concord	Mass
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, Seine	Fr
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Union Industrial Equipment Corp	Fort Chester	NY
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St. New York 4	NY
VITRO CHEMICAL CO., Adv Pg 190	342 Madison Ave. New York 17	NY

BERYLLIUM OXIDE

American Lava Corp.	Manufacturers Rd. Chattanooga 5	Tenn
Atomics International Div. NAA	Box 309, Canoga Park	Cal
Beryl Ores Co.	Box 108, Rt. 1, Arvada	Colo
Beryllium Corp.	Box 1462, Reading	Pa
Beryllium Smelting Co. Ltd.	30-38 Southampton St, London WC 2	Eng
Brush Beryllium Co.	1000 Euclid Ave. Cleveland 3	Ohio
City Chemical Corp.	132 W 22nd St. New York 11	NY
Curtiss-Wright Corp. Research Div.	Quehanna	Pa
Degussa	Box 2001 Frankfurt/Main	Ger
Delta Chemical Works	23 W 60 St. New York 23	NY
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.		
Adv Pg 202	Box 608, San Diego 12	Cal
Job-O-Steinbeck	Reinbek, Bz. Hmb, Germany	
MINERAL CONCENTRATES & CHEMICAL CO. INC.		
Adv Pg 21	Box 180, Loveland	Colo
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, Seine	Fr
UNITED NUCLEAR CORP., Adv Pg 36	265 Winchester Ave. New Haven 4	Conn
Union Industrial Equipment Corp	Fort Chester	NY
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St. New York 4	NY
VITRO CHEMICAL CO., Adv Pg 190	342 Madison Ave. New York 17	NY

1961-1962 DIRECTORY of

BISMUTH

Alloys Unlimited, Inc.	22-01 43rd Ave, LIC 1	NY
Alpha Metals, Inc.	608 Water St, Jersey City 4	NJ
AMERICAN SMELTING & REFINING CO., Adv Pg 67	120 Broadway, New York 5	NY
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 26	Pa
Cerro Sales Corp.	200 Park Ave, New York 22	NY
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
Engelhard Industries, Inc.	113 Astor St, Newark 5	NJ
Fedmetal Metals Canada Ltd.	1400 Norman St, Lachine	Que
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Mallinckrodt Chemical Works	2nd & Mallinckrodt Sts, St. Louis 7	Mo
NATIONAL LEAD CO. Adv. Pgs. 88, 91	111 Broadway, New York 6	NY
Ohio Semiconductors, Inc.	1205 Chesapeake Ave, Columbus 12	Ohio
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Sam-Elements Inc.	Sassenburg Blvd, Sassenburg	Pa
VAR-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY

BORAL

Beside Products, Inc.	836 E Drayton Ave, Ferndale 20	Mich
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 26	Pa
BROOKS & PERKINS, Adv Pg 114	1930 W Fort St. Detroit 16	Mich
Delta Chemical Works	23 W 60 St, New York 23	NY
General Atometals Corp.	200 Yonkers Ave, Yonkers 2	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, Seme	Fr
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
SHOWA DENKO K. K., Adv Pg 113-G	34 Shiba Miyamoto-cho, Minato-ku, Tokyo	Jap

BORON

Alloys Unlimited, Inc.	22-01 43rd Ave, LIC 1	NY
Alpha Metals, Inc.	608 Water St, Jersey City 4	NJ
AMERICAN POTASH & CHEM. CORP., Adv Pg 184	3000 W 6th St. Los Angeles 54	Cal
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Beside Products, Inc.	836 E Drayton Ave, Ferndale 20	Mich
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 26	Pa
City Chemical Corp.	132 W 22nd St, New York 11	NY
Cooper Metallurgical Associates	Box 1991, Cleveland 20	Ohio
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 288	Grant Barrington	Mass
Eagle-Picher Co.	American Bldg, Cincinnati 1	Ohio
Fairmont Chemical Co.	136 Liberty St, New York 6	NY
General Atometals Corp.	200 Yonkers Ave, Yonkers 2	NY
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
Kawecki Chemical Co. Inc.	220 E 42nd St, New York	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, Seme	Fr
Reactor Materials Inc.	Box 473, Peekskill	NY
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Shinkiloffer Corp.	Newfield	NJ
SHOWA DENKO K. K., Adv Pg 113-G	34 Shiba Miyamoto-cho, Minato-ku, Tokyo	Jap
Simercast Div. Chromalloy Div.	169 Western Hwy. West Nyack	NY
SYLCOR DIV. SYLVANIA ELEC PRODS. INC. Adv Pg 38	Castiques Rock Rd. Hicksville	NY
UNITED NUCLEAR CORP., Adv Pg 36	365 Winchester Ave. New Haven 4	Conn
U. S. Borax Research Corp.	412 Crescent Way, Anaheim	Cal
Vanadium Corp. of America	420 Lexington Ave. New York 17	NY
VAR-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY

BORON CARBIDE DISPERSIONS

Beside Products, Inc.	836 E Drayton Ave, Ferndale 20	Mich
Carborundum Co. R & D Div	New Prods. Dr. HBG, Niagara Falls	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 288	Grant Barrington	Mass
General Atometals Corp.	200 Yonkers Ave, Yonkers 2	NY
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. Adv Pg 289	Box 608, San Diego 12	Cal
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. Adv Pg 3	Box 936, Attleboro	Mass
Norton Co.	1 New Bond St. Worcester 6	Mass
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1000 Warren St. Apollo	Pa
Reactor Materials Inc.	Box 473, Peekskill	NY
SHOWA DENKO K. K., Adv Pg 113-G	34 Shiba Miyamoto-cho, Minato-ku, Tokyo	Jap
Simercast Div. Chromalloy Div.	169 Western Hwy. West Nyack	NY
SYLCOR DIV. SYLVANIA ELEC PRODS. INC. Adv Pg 38	Castiques Rock Rd. Hicksville	NY
Ugine-Carbone	15 rue de Rocher, Paris 8, France	
UNITED NUCLEAR CORP., Adv Pg 36	365 Winchester Ave. New Haven 4	Conn
VAR-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY

BORON, STAINLESS STEEL

Allegheny Ludlum Steel Corp.	Oliver Bldg, Pittsburgh 22	Pa
Ass. Ets. Aubert & Duval	41 rue de Villiers, Neuilly-sur-Seine	Fr
CARPENTER STEEL CO. Adv Pg 92	161 W Bern St. Reading	Pa
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 288	Grant Barrington	Mass
General Electric Co. Metallurgical Prods. Dept.	11177 E 8 Mile Rd, Detroit 32	Mich
Hadfields Ltd.	Vulcan St. Sheffield 9	Eng
Metco Ltd.	Chobham, Woking, Surrey	Eng
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1000 Warren St. Apollo	Pa
Reactor Materials Inc.	Box 473, Peekskill	NY
Simercast Div. Chromalloy Div.	169 Western Hwy. West Nyack	NY
Superior Steel Div. Copperweld Steel Co.	Carnegie	Pa
SYLCOR DIV. SYLVANIA ELEC PRODS. INC. Adv Pg 38	Castiques Rock Rd. Hicksville	NY
UGINE, Adv Pg 113-P	10 rue de General Foy, Paris 8	Fr
UNITED NUCLEAR CORP., Adv Pg 36	365 Winchester Ave. New Haven 4	Conn
U. S. STEEL CORP., Adv. Pgs. 50, 51	525 Wm. Penn Pl. Pittsburgh 30	Pa

BORON, URANIUM

Cooper Metallurgical Associates	Box 1991, Cleveland 20	Ohio
Delta Chemical Works	23 W 60 St, New York 23	NY
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. Adv Pg 289	Box 608, San Diego 12	Cal
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1000 Warren St. Apollo	Pa
SYLCOR DIV. SYLVANIA ELEC PRODS. INC. Adv Pg 38	Castiques Rock Rd. Hicksville	NY
UNITED NUCLEAR CORP., Adv Pg 36	365 Winchester Ave. New Haven 4	Conn

BRASS AND BRONZE

Alloys Research & Mfg. Corp.	34-20 57th St. Woodside 77	NY
AMERICAN SMELTING & REFINING CO., Adv Pg 67	120 Broadway, New York 5	NY
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bolton & Sons Ltd., Thomas	168 Regent St. London W1	Eng
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 26	Pa
Bridgeport Brass Co.	30 Grand St, Bridgeport 2	Conn
Chase Brass & Copper Co.	236 Grand St, Waterbury	Conn
Delta Chemical Works	23 W 60 St, New York 23	NY
Federated Metals Canada Ltd.	1400 Norman St. Lachine	Que
NATIONAL LEAD CO. Adv. Pgs. 88, 91	111 Broadway, New York 6	NY
Reliance Incorporated	1210-1212 Adams Ave, Phila 24	Pa
Scovill Mfg. Co. Mills Div.	99 Mill St. Waterbury 20	Conn
Torrance Brass Foundry, Inc	1825 W 213th St, Torrance	Cal
UNITED NUCLEAR CORP., Adv Pg 36	365 Winchester Ave. New Haven 4	Conn
VIEHER & SONS, HYMAN, Adv Pg 66	1300 Hatcher St. Box 373, Richmond 5	Va

CADMIUM

Alloys Unlimited, Inc.	22-01 43rd Ave, LIC 1	NY
Alpha Metals, Inc.	608 Water St, Jersey City 4	NJ
AMERICAN SMELTING & REFINING CO., Adv Pg 67	120 Broadway, New York 5	NY
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 26	Pa
Cerro Sales Corp.	200 Park Ave, New York 22	NY
Chemical Commerce	123 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 288	Grant Barrington	Mass
Eagle-Picher Co.	American Bldg, Cincinnati 1	Ohio
Fedmetal Metals Canada Ltd.	1400 Norman St. Lachine	Que
General Atometals Corp.	200 Yonkers Ave, Yonkers 2	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Mallinckrodt Chemical Works	2nd & Mallinckrodt Sts, St. Louis 7	Mo
Metco Ltd.	Chobham, Woking, Surrey	Eng
NATIONAL LEAD CO. Adv. Pgs. 88, 91	111 Broadway, New York 6	NY
Nuclear Fuels & Rare Metals Corp.	617 E 18th St, LA 21	Cal
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1000 Warren St. Apollo	Pa
Overpelt Lommel & de Corphalie SA, cie des Metaux	54 rue des Fabriques, Brussels	Belg
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Sassenburg Blvd, Sassenburg	Pa
UNITED NUCLEAR CORP., Adv Pg 36	365 Winchester Ave. New Haven 4	Conn
VAR-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY

CALCIUM

Barium & Chemicals, Inc.	4942 Erie St. Willoughby	Ohio
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 26	Pa
City Chemical Corp.	132 W 22nd St, New York 11	NY
Degussa	Box 1060 Frankfurt/Main	Ger
Delta Chemical Works	23 W 60 St, New York 23	NY
General Atometals Corp.	200 Yonkers Ave, Yonkers 2	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Metal Hydrides, Inc.	22-24 Congress St, Beverly	Mass
Metro Metals, Inc.	Canaan	Conn
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, Seme	Fr
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Sassenburg Blvd, Sassenburg	Pa
Union Carbide Metals Co. Div. UCC	270 Park Ave, New York 17	NY
Vanadium Corp. of America	420 Lexington Ave. New York 17	NY
VAR-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY

CERIUM

Alpha Metals, Inc.	608 Water St, Jersey City 4	NJ
AMERICAN POTASH & CHEM. CORP., Adv Pg 184	3000 W 6th St. Los Angeles 54	Cal
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 65th Ave. Philadelphia 26	Pa
Cerium Metals & Alloys Div. Rosson Metals Corp.	46-65 Manufacturers Pl. Newark 5	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
General Atometals Corp.	200 Yonkers Ave, Yonkers 2	NY
Grace & Co., W. R., Davison Chemical Div.	Box 166, Nuttgren Plaza	NJ
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, Seme	Fr
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Sassenburg Blvd, Sassenburg	Pa
Simercast Div. Chromalloy Div.	169 Western Hwy. West Nyack	NY
VAR-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY
VITRO CHEMICAL CO., Adv Pg 189	342 Madison Ave. NewYork 17	NY

CESIUM

AMERICAN POTASH & CHEM. CORP., Adv Pg 184	3000 W 6th St. Los Angeles 54	Cal
Bram Metallurgical-Chemical Co.	820 65th Ave. Philadelphia 26	Pa
Chemical Commerce	123 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St. New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
Fairmont Chemical Co.	136 Liberty St. New York 6	NY
General Atometals Corp.	200 Yonkers Ave, Yonkers 2	NY
Kawecki Chemical Co. Inc.	220 E 42nd St, New York	NY
MSA Research Corp	Callery	Pa
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Penn Rare Metals, Inc.	Box 1-A, Revere	Pa
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Sassenburg Blvd, Sassenburg	Pa

CHROMIUM

Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 65th Ave. Philadelphia 26	Pa
Chicago Development Corp.	5610 47th Ave, Riverdale	Md
City Chemical Corp.	132 W 22nd St, New York 11	NY
Cooper Metallurgical Associates	Box 1991, Cleveland 20	Ohio
Delta Chemical Works	23 W 60 St, New York 23	NY
General Atometals Corp.	200 Yonkers Ave, Yonkers 2	NY
Kawecki Chemical Co. Inc.	220 E 42nd St, New York	NY
Kuhlmann, Ets.	25 bd de l'Amiral-Bruix, Paris 16e	Fr
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Nuclear Metals, Inc.	Box 223 Concord	Mass
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Shinkiloffer Corp.	Newfield	NJ
SHOWA DENKO K. K., Adv Pg 113-G	34 Shiba Miyamoto-cho, Minato-ku, Tokyo	Jap
Union Carbide Metals Co. Div. UCC	270 Park Ave, New York 17	NY
Vanadium Corp. of America	420 Lexington Ave. New York 17	NY
VAR-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY

COBALT

Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 65th Ave. Philadelphia 26	Pa
City Chemical Corp.	132 W22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
Driver Co., Wilbur B.	1875 McCarter Hwy. Newark 4	NJ
General Atometals Corp.	200 Yonkers Ave, Yonkers 2	NY
Instruments Inc.	Box 566, Tulsa	Okla
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Nuclear Fuels & Rare Metals Corp.	617 E 18th St, LA 21	Cal
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
UGINE, Adv Pg 113-P	10 rue de General Foy, Paris 8	Fr
VAR-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY

COPPER

Alloys Research & Mfg. Corp.	34-20 57th St. Woodside 77	NY
AMERICAN SMELTING & REFINING CO., Adv Pg 67	120 Broadway, New York 5	NY
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bolton & Sons Ltd., Thomas	168 Regent St. London W1	Eng

Beam Metallurgical-Chemical Co.	850 65th Ave, Philadelphia 26	Pa
Bridgeport Brass Co.	30 Grand St, Bridgeport 5	Conn
Cerro Sales Corp.	300 Park Ave, New York 22	NY
Chase Brass & Copper Co.	236 Grand St, Waterbury	Conn
Chromium Corporation of America	Box 1225, Waterbury 20	Conn
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 200	Great Barrington	Mass
Driver Co., Wilbur B.	1898 McCarter Hwy, Newark 4	NJ
Fischel Co., Ernest L.	160 Broadway, New York 38	NY
Mallinckrodt Chemical Works	2nd & Mallinckrodt Sts, St. Louis 7	Mo
Nuclear Metals, Inc.	Box 223 Concord	Mass
Philips Dodge Copper Products Corp.	300 Park Ave, New York 22	NY
Reliance Incorporated	1210-1212 Adams Ave, Phila 24	Pa
Revere Copper & Brass, Inc.	230 Park Ave, New York 17	NY
Scovill Mfg. Co. Mills Div.	99 Mill St, Waterbury 20	Conn
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
Torrance Brass Foundry, Inc	1055 W 213th St, Torrance	Cal
VIENER & SONS, HYMAN, Adv Pg 66	2000 Hermitage St. Box 571, Richmond 5	Va
Western Gold & Platinum Co.	806 Harbor Blvd, Belmont	Cal

DYSPROSIUM

Alloys Unlimited, Inc.	23-01 43rd Ave, LIC 1	NY
AMERICAN POTASH & CHEM. CORP.,		
Adv Pg 184	3000 W 6th St, Los Angeles 54	Cal
Beam Metallurgical-Chemical Co.	850 65th Ave, Philadelphia 26	Pa
Carlson Metals & Alloys Div. Rosson Metals Corp.	45-05 Manufacturers Pl, Newark 5	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 200	Great Barrington	Mass
Fairmont Chemical Co.	136 Liberty St, New York 6	NY
General Astrometals Corp.	200 Tonlawn Ave, Tonlawn 2	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV.		
Adv Pg 178	St. Louis	Mich
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
Simmonsat Div. Chemalloy Div.	169 Western Hwy, West Nyack	NY
SYLCOR DIV. SYLVANIA ELEC PRODS. INC.		
Adv Pg 26	Castleton Rock Rd. Hicksville	NY
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St. New York 4	NY
VITRO CHEMICAL CO., Adv Pg 190	342 Madison Ave. New York 17	NY
Vitro Corp. of America	261 Madison Ave, New York 36	NY

DYSPROSIUM DISPERSIONS

Alloys Unlimited, Inc.	23-01 43rd Ave, LIC 1	NY
American Lava Corp.	Manufacturers Rd. Chattanooga 5	Tenn
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 200	Great Barrington	Mass
General Astrometals Corp.	200 Tonlawn Ave, Tonlawn 2	NY
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.		
Adv Pg 202	Box 608, San Diego 12	Cal
Grace & Co., W. R. Davison Chemical Div.	Erwin	Tenn
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.		
Adv Pg 2	Box 898, Attleboro	Mass
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV.		
Adv Pg 178	St. Louis	Mich
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Reactor Materials Inc.	Box 412, Peekskill	NY
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
SYLCOR DIV. SYLVANIA ELEC PRODS. INC.		
Adv Pg 26	Castleton Rock Rd. Hicksville	NY
UNITED NUCLEAR CORP., Adv Pg 36	383 Winchester Ave. New Haven 4	Conn
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St. New York 4	NY

ERBIUM

Alloys Unlimited, Inc.	23-01 43rd Ave, LIC 1	NY
AMERICAN POTASH & CHEM. CORP.,		
Adv Pg 184	3000 W 6th St. Los Angeles 54	Cal
Beam Metallurgical-Chemical Co.	850 65th Ave, Philadelphia 26	Pa
Carlson Metals & Alloys Div. Rosson Metals Corp.	45-05 Manufacturers Pl, Newark 5	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 200	Great Barrington	Mass
General Astrometals Corp.	200 Tonlawn Ave, Tonlawn 2	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV.		
Adv Pg 178	St. Louis	Mich
Nuclear Fuels & Rare Metals Corp.	817 E 10th St, LA 21	Cal
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
Simmonsat Div. Chemalloy Div.	169 Western Hwy, West Nyack	NY
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St. New York 4	NY
VITRO CHEMICAL CO., Adv Pg 190	342 Madison Ave. New York 17	NY

EUROPIUM

Alloys Unlimited, Inc.	23-01 43rd Ave, LIC 1	NY
AMERICAN POTASH & CHEM. CORP.,		
Adv Pg 184	3000 W 6th St. Los Angeles 54	Cal
Beam Metallurgical-Chemical Co.	850 65th Ave. Philadelphia 26	Pa
Carlson Metals & Alloys Div. Rosson Metals Corp.	45-05 Manufacturers Pl. Newark 5	NJ
Chemical Commerce	123 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St. New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 200	Great Barrington	Mass
Fairmont Chemical Co.	136 Liberty St. New York 6	NY
General Astrometals Corp.	200 Tonlawn Ave. Tonlawn 2	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV.		
Adv Pg 178	St. Louis	Mich
Nuclear Fuels & Rare Metals Corp.	817 E 10th St, LA 21	Cal
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Reactor Materials Inc.	Box 412, Peekskill	NY
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
Simmonsat Div. Chemalloy Div.	169 Western Hwy, West Nyack	NY
SYLCOR DIV. SYLVANIA ELEC PRODS. INC		
Adv Pg 26	Castleton Rock Rd. Hicksville	NY
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St. New York 4	NY
VITRO CHEMICAL CO., Adv Pg 190	342 Madison Ave. New York 17	NY
Vitro Corp. of America	261 Madison Ave, New York 36	NY

GADOLINIUM

Alloys Unlimited, Inc.	23-01 43rd Ave, LIC 1	NY
AMERICAN POTASH & CHEM. CORP.,		
Adv Pg 184	3000 W 6th St. Los Angeles 54	Cal
Beam Metallurgical-Chemical Co.	850 65th Ave, Philadelphia 26	Pa
Carlson Metals & Alloys Div. Rosson Metals Corp.	45-05 Manufacturers Pl. Newark 5	NJ
City Chemical Corp.	132 W 22nd St. New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 200	Great Barrington	Mass
Fairmont Chemical Co.	136 Liberty St. New York 6	NY
General Astrometals Corp.	200 Tonlawn Ave. Tonlawn 2	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV.		
Adv Pg 178	St. Louis	Mich
Nuclear Fuels & Rare Metals Corp.	817 E 10th St, LA 21	Cal
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Reactor Materials Inc.	Box 412, Peekskill	NY
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
Simmonsat Div. Chemalloy Div.	169 Western Hwy, West Nyack	NY
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St. New York 4	NY
VITRO CHEMICAL CO., Adv Pg 190	342 Madison Ave. New York 17	NY
Vitro Corp. of America	261 Madison Ave, New York 36	NY

GADOLINIUM DISPERSIONS

American Lava Corp.	Manufacturers Rd. Chattanooga 5	Tenn
Delta Chemical Works	23 W 60 St, New York 23	NY
General Astrometals Corp.	200 Tonlawn Ave, Tonlawn 2	NY
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.		
Adv Pg 202	Box 608, San Diego 12	Cal
Grace & Co., W. R. Davison Chemical Div.	Erwin	Tenn
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV.		
Adv Pg 178	St. Louis	Mich
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Reactor Materials Inc.	Box 412, Peekskill	NY
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St. New York 4	NY
VITRO CHEMICAL CO., Adv Pg 190	342 Madison Ave. New York 17	NY

GALLIUM

Alloys Unlimited, Inc.	23-01 43rd Ave, LIC 1	NY
Alpha Metals, Inc.	898 Wave St. Jersey City 4	NJ
Aluminum Co. of America	1501 Alcoa Bldg, Pittsburgh 19	Pa
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Beam Metallurgical-Chemical Co.	850 65th Ave. Philadelphia 26	Pa
Chemical Commerce	123 Sussex Ave. Newark 4	NJ
City Chemical Corp.	132 W 22nd St. New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
Eagle-Picher Co.	American Bldg, Cincinnati 1	Ohio
Fairmont Chemical Co.	136 Liberty St. New York 6	NY
Kawecki Chemical Co. Inc.	220 E 42nd St, New York	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Penn Rare Metals, Inc.	Box 1-A, Revere	Pa
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St. New York 4	NY

GERMANIUM

Alloys Unlimited, Inc.	23-01 43rd Ave, LIC 1	NY
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Beam Metallurgical-Chemical Co.	850 65th Ave. Philadelphia 26	Pa
Chemical Commerce	123 Sussex Ave. Newark 4	NJ
City Chemical Corp.	132 W 22nd St. New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
Eagle-Picher Co.	American Bldg. Cincinnati 1	Ohio
Fairmont Chemical Co.	136 Liberty St. New York 6	NY
Kawecki Chemical Co. Inc.	220 E 42nd St, New York	NY
Mackay, Inc., A.D.	198 Broadway, New York 38	NY
Penn Rare Metals, Inc.	Box 1-A, Revere	Pa
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
SYLCOR DIV. SYLVANIA ELEC PRODS. INC.		
Adv Pg 26	Castleton Rock Rd. Hicksville	NY
Sylvania Elec Prods Inc. Chem & Met Div.	Towanda	Pa
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St. New York 4	NY

GOLD

Alloys Research & Mfg. Corp.	34-32 57th St, Woodside 77	NY
Alloys Unlimited, Inc.	23-01 43rd Ave, LIC 1	NY
Alpha Metals, Inc.	898 Wave St, Jersey City 4	NJ
AMERICAN SMELTING & REFINING CO.,		
Adv Pg 47	120 Broadway, New York 5	NY
Bishop & Co., J., Platinum Works	Malvern	Pa
Beam Metallurgical-Chemical Co.	850 65th Ave, Philadelphia 26	Pa
Chemical Commerce	123 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Cohn Corp., Sigmund	121 E Columbia Ave, Mt. Vernon	NY
Consolidated Reactive Metals, Inc.	115 Hoyt St. Mamaroneck	NY
Degussa	Box 3880 Frankfurt/Main	Ger
Delta Chemical Works	23 W 60 St, New York 23	NY
Engelhard Industries, Inc.	113 Astor St, Newark 2	NJ
Handy & Harman	850 Third Ave, New York 22	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.		
Adv Pg 2	Box 898, Attleboro	Mass
NATIONAL LEAD CO. Adv. Pgs. 60, 61	111 Broadway, New York 6	NY
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St. New York 4	NY
Western Gold & Platinum Co.	806 Harbor Blvd, Belmont	Cal

HAFNIUM

Alloys Unlimited, Inc.	23-01 43rd Ave, LIC 1	NY
Atlas Titanium, Ltd.	Center St, Welland, Ont	Can
Beam Metallurgical-Chemical Co.	850 65th Ave, Philadelphia 26	Pa
Carborundum Metals Co.	Alloys	NY
Chemical Commerce	123 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 200	Great Barrington	Mass
Foote Mineral Co.	18 W Chelten Ave, Phila 44	Pa
General Astrometals Corp.	200 Tonlawn Ave, Tonlawn 2	NY
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.		
Adv Pg 202	Box 608, San Diego 12	Cal
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),		
Adv. Pgs. 217, 219, 221	1000 Warren St. Apollo	Pa
Reactive Metals Inc. Sub. Nat. Distillers & Chem. Corp	Niles	Ohio
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
Torrance Brass Foundry, Inc	1055 W 213th St, Torrance	Cal
USINE, Adv Pg 113-P	18 rue de General Foy, Paris 8	Fr
UNITED NUCLEAR CORP., Adv Pg 36	383 Winchester Ave. New Haven 4	Conn
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St. New York 4	NY
WAH CHANG CORP., Adv Pg 122	220 Broadway, New York 7	NY
WESTINGHOUSE ELEC. CORP. MATERIALS DPG.		
Adv. Pgs. 70, 71	Blairsville	Pa

HAFNIUM DISPERSIONS

American Lava Corp.	Manufacturers Rd. Chattanooga 5	Tenn
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 200	Great Barrington	Mass
General Astrometals Corp.	200 Tonlawn Ave, Tonlawn 2	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),		
Adv. Pgs. 217, 219, 221	1000 Warren St. Apollo	Pa

Reactor Materials Inc.	Box 473, Pennhill	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
UNITED NUCLEAR CORP., Adv Pg 36	365 Winchester Ave. New Haven 4	Conn
VAN-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY

HOLMIUM

AMERICAN POTASH & CHEM CORP., Adv Pg 184	3000 W 6th St. Los Angeles 54	Cal
Bram Metallurgical-Chemical Co.	820 65th Ave. Philadelphia 26	Pa
City Chemical Corp.	132 W 22nd St. New York 11	NY
Delta Chemical Works	23 W 60 St. New York 23	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV. Adv Pg 118	St. Louis	Mich
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
Sintercast Div. Chromalloy Div.	169 Western Hwy. West Nyack	NY

INDIUM

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
Alpha Metals, Inc.	602 Wanz St, Jersey City 4	NJ
AMERICAN SMELTING & REFINING CO., Adv Pg 67	120 Broadway, New York 5	NY
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 65th Ave. Philadelphia 26	Pa
Cerro Sales Corp.	300 Park Ave, New York 22	NY
Chemical Commerce	123 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Degussa	Box 3953 Frankfurt/Main	Ger
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 288	Great Barrington	Mass
Fairmont Chemical Co.	136 Liberty St, New York 6	NY
Federated Metals Canada Ltd.	1400 Norman St, Lachine	Que
Kawecki Chemical Co. Inc.	220 E 42nd St, New York	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Ohio Semiconductors, Inc.	1396 Chesapeake Ave, Columbus 23	Ohio
Reactor Materials Inc.	Box 473, Pennhill	NY
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
VAN-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY
Wesman Gold & Platinum Co.	325 Harbor Blvd, Belmont	Cal

IRIDIUM

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
Bishop & Co., J., Platinum Works	Malvern	Pa
Bram Metallurgical-Chemical Co.	820 65th Ave. Philadelphia 26	Pa
Chemical Commerce	123 Sussex Ave. Newark 4	NJ
City Chemical Corp.	132 W 22nd St. New York 11	NY
Cohn Corp., Sigmund	121 S Columbus Ave. Mt. Vernon	NY
Consolidated Reactive Metals, Inc.	115 Hoyt St. Mamaroneck	NY
Degussa	Box 3953 Frankfurt/Main	Ger
Delta Chemical Works	23 W 60 St, New York 23	NY
Fleischman, Reid & Co, Inc.	1271 Ave. of Americas, New York 20	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Morris, Ltd., B. G.	Bilton Rd. Coventry	Eng
NATIONAL LEAD CO. Adv. Pgs. 88, 91	111 Broadway, New York 6	NY
Nuclear Foils & Rare Metals Corp.	817 E 18th St, LA 21	Cal
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
VAN-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY

IRON

Alloys Research & Mfg. Corp.	34-32 57th St. Woodside 77	NY
City Chemical Corp.	132 W 22nd St. New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
Driver Co., Wilbur B.	1875 McCarter Hwy. Newark 4	NJ
mallinckrodt Chemical Works	2nd & Mallinckrodt Sts. St. Louis 7	Mo
Republic Steel Corp.	1441 Republic Bldg. Cleveland 1	Ohio
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
SHOWA DENKO K. K., Adv Pg 112-B	34 Shiba Hiyoemon-cho, Minato-ku, Tokyo	Jap
U. S. STEEL CORP., Adv. Pgs. 90, 91	525 Wm. Penn Pl. Pittsburgh 30	Pa
VAN-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY

LANTHANUM

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
Bram Metallurgical-Chemical Co.	820 65th Ave. Philadelphia 26	Pa
Carlon Metals & Alloys Div. Rosson Metals Corp.	49-05 Manufacturers Pl. Newark 5	NJ
Chemical Commerce	123 Sussex Ave. Newark 4	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 288	Great Barrington	Mass
General Aromatents Corp.	370 Tonnele Ave, Tonnele 8	NY
Gonz & Co., V. E., Davison Chemical Div.	Box 188, Pompton Plains	NJ
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV. Adv Pg 118	St. Louis	Mich
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
VAN-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY
VITRO CHEMICAL CO., Adv Pg 198	342 Madison Ave. New York 17	NY

LEAD

Allied Lead Construction Co.	6836 S Chicago Ave, Chicago	Ill
Alloys Research & Mfg. Corp.	34-32 57th St. Woodside 77	NY
Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
Alpha Metals, Inc.	602 Wanz St, Jersey City 4	NJ
AMERAY CORP., Adv Pg 113	Essex 46, Essex	NJ
AMERICAN SMELTING & REFINING CO., Adv Pg 67	120 Broadway, New York 5	NY
Baker Chemical Co., J. T.	Phillipsburg	NJ
BAR-RAY PRODUCTS, INC. Adv Pg 12	289 20th St. Brooklyn 32	NY
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave. Brooklyn 7	NY
CAMBRIDGE SMELTING CO. Adv Pg 238	169 Pacific St, Cambridge	Mass
Cerro Sales Corp.	300 Park Ave, New York 22	NY
Chemical Commerce	123 Sussex Ave. Newark 4	NJ
City Chemical Corp.	132 W 22nd St. New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
Eagle-Picher Co.	American Bldg. Cincinnati 1	Ohio
Edlow Lead Co.	729 Bank St. Columbus 16	Ohio
Enthoven & Sons Ltd., H. J.	South Pl, London, EC2	Eng
Ethyl Corp.	100 Park Ave. New York 17	NY
Federated Metals Canada Ltd.	1400 Norman St, Lachine	Que
Fischel Co., Ernest L.	150 Broadway, New York 38	NY
Knapp Construction Co., Andrew	23-15 Borden Ave, Long Island City 1	NY
Knapp Mills, Inc.	23-15 Borden Ave, LIC 1	NY
Lead Fabricators, Inc	25 Belgrove Dr, Kearny	NJ
LEAD PRODUCTS, INC. Adv Pg 239	Norfolk Rd. Worcester	Conn
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Mallinckrodt Chemical Works	Second & Mallinckrodt Sts. St. Louis 7	Mo
Metco Ltd.	Cobham, Woking, Surrey	Eng
NATIONAL LEAD CO. Adv. Pgs. 88, 91	111 Broadway, New York 6	NY
NUCLEAR, INC., Adv Pg 230	110 Pacific St. Cambridge	Mass
Overpelt Lommel & de Corphalie SA, cie des Metaux	54 rue des Fabriques, Brussels	Belg
Radiation Products, Inc.	Pl. 46 St, Flushing 60	NY
Reliance Incorporated	1210-1212 Adams Ave, Phila 26	Pa
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
VAN-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY
VIENER & SONS, HYMAN, Adv Pg 66	3300 Hermitage St. Box 573, Richmond 5	Va

LITHIUM

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
AMERICAN POTASH & CHEM. CORP., Adv Pg 184	3000 W 6th St. Los Angeles 54	Cal
Barium & Chemicals, Inc.	4043 Erie St. Willoughby	Ohio
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 65th Ave. Philadelphia 26	Pa
Chemical Commerce	123 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St. New York 11	NY
Degussa	Box 3953 Frankfurt/Main	Ger
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 288	Great Barrington	Mass
Foote Mineral Co.	18 W Chelten Ave, Phila 44	Pa
Kawecki Chemical Co. Inc.	220 E 42nd St, New York	NY
Lithium Corp. of America, Inc.	300 5th Ave. New York 98	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Nuclear Foils & Rare Metals Corp.	817 E 18th St, LA 21	Cal
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
SYLCOR DIV. SYLVANIA ELEC PRODS. INC. Adv Pg 26	Castlegate Reach Rd. Hicksville	NY
UNITED NUCLEAR CORP., Adv Pg 36	365 Winchester Ave. New Haven 4	Conn
VAN-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY

LUTETIUM

AMERICAN POTASH & CHEM. CORP., Adv Pg 184	3000 W 6th St. Los Angeles 54	Cal
Bram Metallurgical-Chemical Co.	820 65th Ave. Philadelphia 26	Pa
City Chemical Corp.	132 W 22nd St. New York 11	NY
Delta Chemical Works	23 W 60 St. New York 23	NY
General Aromatents Corp.	370 Tonnele Ave. Tonnele 8	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV. Adv Pg 118	St. Louis	Mich
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
Sintercast Div. Chromalloy Div.	169 Western Hwy. West Nyack	NY
VITRO CHEMICAL CO., Adv Pg 198	342 Madison Ave. New York 17	NY

MAGNESIUM

Alloys Research & Mfg. Corp.	34-32 57th St, Woodside 77	NY
Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
Aluminum Co. of America	1501 Alcoa Bldg. Pittsburgh 19	Pa
AMERICAN SMELTING & REFINING CO., Adv Pg 67	120 Broadway, New York 5	NY
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 65th Ave. Philadelphia 26	Pa
BROOKS & PERKINS, Adv Pg 114	1950 W Fort St. Detroit 16	Mich
City Chemical Corp.	132 W 22nd St. New York 11	NY
Delta Chemical Works	23 W 60 St. New York 23	NY
Dow Chemical Co.	Midland	Mich
Fischel Co., Ernest L.	150 Broadway, New York 38	NY
HARVEY ALUMINUM, Adv Pg 39	19200 S Western Ave. Torrance	Cal
Kawecki Chemical Co. Inc.	220 E 42nd St, New York	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Mallinckrodt Chemical Works	2nd & Mallinckrodt Sts. St. Louis 7	Mo
Metco Metals, Inc.	Canton	Conn
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
Torrance Brass Foundry, Inc	18115 W 213th St, Torrance	Cal
Tube Investments Ltd.	Astor Manor, Birmingham 6	Eng
UGINE, Adv Pg 112-P	18 rue de General Foy, Paris 8	Fr
Vanadium Corp. of America	420 Lexington Ave. New York 17	NY
VAN-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY

MAGNESIUM OXIDE – LOW BORON CONTENT

American Lava Corp.	Manufacturers Rd. Chattanooga 5	Tenn
Basic, Inc.	845 Hanna Bldg. Cleveland 14	Ohio
Delta Chemical Works	23 W 60 St. New York 23	NY
Electro Refractories & Abrasives Corp.	886 Delaware Ave. Buffalo 8	NY
Fischel Co., Ernest L.	150 Broadway, New York 38	NY
International Minerals & Chemical Corp.	Old Orchard Rd. Skokie	Ill
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Norton Co.	1 New Bond St. Worcester 6	Mass
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	3000 Vinson St. Apollo	Pa
Saxonburg Ceramics, Inc.	Box 187, Saxonburg	Pa
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa

MANGANESE

AMERICAN POTASH & CHEM. CORP., Adv Pg 184	3000 W 6th St. Los Angeles 54	Cal
AMERICAN SMELTING & REFINING CO., Adv Pg 67	120 Broadway, New York 5	NY
Barium & Chemicals, Inc.	4043 Erie St, Willoughby	Ohio
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 65th Ave. Philadelphia 26	Pa
Chemical Commerce	123 Sussex Ave, Newark 4	NJ
Chicago Development Corp.	5610 47th Ave. Riverdale	Md
City Chemical Corp.	132 W 22nd St. New York 11	NY
Delta Chemical Works	23 W 60 St. New York 23	NY
Foote Mineral Co.	18 W Chelten Ave. Phila 44	Pa
Kohlmann, Ets.	25 bd de l'Amiral-Bruix, Paris 16e	Fr
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Reliance Incorporated	1210-1212 Adams Ave, Phila 26	Pa
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
UGINE, Adv Pg 112-P	19 rue de General Foy, Paris 8	Fr
Union Carbide Metals Co. Div. UCC	270 Park Ave. New York 17	NY
Vanadium Corp. of America	420 Lexington Ave. New York 17	NY
VAN-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY

MERCURY

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 65th Ave. Philadelphia 26	Pa
City Chemical Corp.	132 W 22nd St. New York 11	NY
Delta Chemical Works	23 W 60 St. New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 288	Great Barrington	Mass
General Electric Co. Lamp Metals & Components Dept.	21800 Tungsten Rd. Cleveland 17	Ohio
Kaff Scientific Insecticide Corp.	Box 1168, El Cajon	Cal
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Mallinckrodt Chemical Works	2nd & Mallinckrodt Sts. St. Louis 7	Mo
Radiochemistry, Inc	1111 W St. Catherine St, Louisville 10	Ky
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
VAN-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY
VIENER & SONS, HYMAN, Adv Pg 66	3300 Hermitage St. Box 573, Richmond 5	Va

MOLYBDENUM

Alloys Research & Mfg. Corp.	34-32 57th St, Woodside 77	NY
Alloys Unlimited, Inc.	23-01 43rd Ave, LIC 1	NY
Associated Engrg. & Mfg. Corp.	210 Stonehouse Rd, Glen Ridge	NJ
Atlas Titanium, Ltd.	Centre St, Welland, Ont.	Can
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 46th Ave, Philadelphia 26	Pa
Chemical Commerce	123 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Climax Molybdenum Co. Div. Amer. Metal Climax Inc.	1270 Ave of the Americas, New York 20	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 208	Great Barrington	Mass
Engelhard Industries, Inc.	113 Astor St, Newark 2	NJ
Fansteel Metallurgical Corp.	North Chicago	Ill
General Electric Co. Lamp Metals & Components Dept.	21800 Tungsten Rd, Cleveland 17	Ohio
HARVEY ALUMINUM, Adv Pg 19	19200 S Western Ave, Torrance	Cal
Kuhlmann, Ets.	25 bd de l'Amiral-Bruix, Paris 16e	Fr
LINDE CO. DIV. OF UCC, Adv Pg 125	270 Park Ave, New York 17	NY
Mackay, Inc., A. D.	100 Broadway, New York 38	NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. Adv Pg 2	Box 5936, Attleboro	Mass
Metco Ltd.	Chobham, Woking, Surrey	Eng
Nuclear Fuels & Rare Metals Corp.	817 E 18th St, LA 21	Cal
Nuclear Metals, Inc.	Box 223 Concord	Mass
Oregon Metallurgical Corp.	Box 484, Albany	Ore
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
Shattuck Chemical Co., S. W.	1801 S Bannock St, Denver 23	Colo
Shieldalloy Corp.	Newfield	NJ
Stauffer Chemical Co.	380 Madison Ave, New York 17	NY
Sylvania Elec Prods Inc. Chem & Met Div.	Towanda	Pa
Torrance Brass Foundry, Inc	1825 W 213th St, Torrance	Cal
Universal Cyclops Steel Corp.	Bridgeville	Pa
Vacuum Technology, Inc.	7933 Gloria Ave, Van Nuys	Cal
VAR-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St, New York 4	NY
WAH CHANG CORP., Adv Pg 123	233 Broadway, New York 7	NY
WESTINGHOUSE ELEC. CORP. MATERIALS MFG. Adv. Pgs. 70, 71	Blairsville	Pa

MOLYBDENUM FINISH

Alloys Unlimited, Inc.	23-01 43rd Ave, LIC 1	NY
Associated Engrg. & Mfg. Corp.	210 Stonehouse Rd, Glen Ridge	NJ
Atlas Titanium, Ltd.	Centre St, Welland, Ont.	Can
Bram Metallurgical-Chemical Co.	820 46th Ave, Philadelphia 26	Pa
Cron Co., H.	3229 Bergenline Ave, Union City	NJ
Delta Chemical Works	23 W 60 St, New York 23	NY
Fansteel Metallurgical Corp.	North Chicago	Ill
General Electric Co. Lamp Metals & Components Dept.	21800 Tungsten Rd, Cleveland 17	Ohio
Kuhlmann, Ets.	25 bd de l'Amiral-Bruix, Paris 16e	Fr
Mackay, Inc., A. D.	100 Broadway, New York 38	NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. Adv Pg 2	Box 5936, Attleboro	Mass
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Sylvania Elec Prods Inc. Chem & Met Div.	Towanda	Pa
VAR-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St, New York 4	NY
Western Gold & Platinum Co.	525 Harbor Blvd, Belmont	Cal
WESTINGHOUSE ELEC. CORP. MATERIALS MFG. Adv. Pgs. 70, 71	Blairsville	Pa

NEODYMIUM

AMERICAN POTASH & CHEM. CORP., Adv Pg 184	3000 W 6th St, Los Angeles 54	Cal
Bram Metallurgical-Chemical Co.	820 46th Ave, Philadelphia 26	Pa
Carlisle Metals & Alloys Div. Amax Metals Corp.	42-42 Manufacturers Pl, Newark 5	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
General Aniline & Film Corp.	250 Hudson Ave, Yonkers 3	NY
Mackay, Inc., A. D.	100 Broadway, New York 38	NY
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV. Adv Pg 119	St. Louis	Mich
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
Stanocast Div. Chemalloy Div.	169 Weston Hwy, West Hyack	NY
VITRO CHEMICAL CO., Adv Pg 198	342 Madison Ave, New York 17	NY

NICKEL

Alloys Research & Mfg. Corp.	34-32 57th St, Woodside 77	NY
Alloys Unlimited, Inc.	23-01 43rd Ave, LIC 1	NY
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 46th Ave, Philadelphia 26	Pa
Caird Ltd., Francis	Africa House, Kingsway, London WC 2	Eng
Chemalloy Corporation of America	Box 1225, Waterbury 20	Conn
City Chemical Corp.	132 W 22nd St, New York 11	NY
Cohn Corp., Sigmund	121 S Columbia Ave, Mt. Vernon	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
Dover Co., Wilber B.	1875 McCarter Hwy, Newark 4	NJ
FLOWLINE CORP. Adv Pg 180	New Castle	Pa
General Alloys Co.	400 W 1st St, Boston 27	Mass
Huntington Alloy Prods Div. Intl. Nickel Co. Inc.	Huntington 17	W Va
SEARPOTY DIV. GEN. PRECISION, INC. Adv Pg 221	1150 McBride Ave, Little Falls	NJ
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. Adv Pg 2	Box 5936, Attleboro	Mass
Metco Ltd.	Chobham, Woking, Surrey	Eng
Belmont Incorporated	1210-1212 Adams Ave, Phila 26	Pa
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
VAR-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St, New York 4	NY
Wisconsin Centrifugal Foundry, Inc.	906 E St, Paul Ave, Waukesha	Wis

NICKEL ALLOYS

Allegheny Ludlum Steel Corp.	Oliver Bldg, Pittsburgh 22	Pa
Alloys Research & Mfg. Corp.	34-32 57th St, Woodside 77	NY
AMERICAN SMELTING & REFINING CO., Adv Pg 67	120 Broadway, New York 5	NY
Ate. Ets. Aubert & Duval	41 rue de Villiers, Neuilly-sur-Seine	Fr
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 46th Ave, Philadelphia 26	Pa
Bridgeport Brass Co.	30 Grand St, Bridgeport 2	Conn
Caird Ltd., Francis	Africa House, Kingsway, London WC 2	Eng
CARPENTER STEEL CO. Adv Pg 92	101 W Bern St, Reading	Pa
Chase Brass & Copper Co.	236 Grand St, Waterbury	Conn
Consolidated Reactive Metals, Inc.	115 Hoyt St, Mamaroneck	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
Dover Co., Wilber B.	1875 McCarter Hwy, Newark 4	NJ
Firth-Sterling Stampings Ltd.	Dudley Dale, Nr. Matlock, Derbyshire, Eng	
FLOWLINE CORP. Adv Pg 180	New Castle	Pa
General Alloys Co.	400 W 1st St, Boston 27	Mass
General Electric Co. Metallurgical Prods. Dept.	11177 E 8 Mile Rd, Detroit 32	Mich
Haynes Stellite Co. Div. of UCC	270 Park Ave, New York 17	NY
Huntington Alloy Prods. Div. Intl. Nickel Co. Inc.	Huntington 17	W Va
Metal Hydrides, Inc.	12-34 Congress St, Beverly	Mass
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. Adv Pg 2	Box 5936, Attleboro	Mass
Metco Ltd.	Chobham, Woking, Surrey	Eng
National Forge Co	Irvine, Warren City	Pa
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1000 Vernon St, Apollo	Pa
Belmont Incorporated	1210-1212 Adams Ave, Phila 26	Pa
Revere Copper & Brass Inc.	230 Park Ave, New York 17	NY
SANDUSKY FOUNDRY & MACHINE CO. Adv Pg 23	W Market St, Sandusky	Ohio
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Shieldalloy Corp.	Newfield	NJ
Superior Steel Div. Copperweld Steel Co.	Carnegie	Pa
Union Steel Corp.	1560 Ashwood Terr, Union	NJ
Universal Cyclops Steel Corp.	Bridgeville	Pa
Wallingford Steel Co.	80 Valley St, Wallingford	Conn
Waukesha Foundry Co.	Lincoln Ave, Waukesha	Wis
WESTINGHOUSE ELEC. CORP. MATERIALS MFG. Adv. Pgs. 70, 71	Blairsville	Pa
Wisconsin Centrifugal Foundry, Inc.	906 E St, Paul Ave, Waukesha	Wis

NIOBIUM (COLUMBIUM)

Alloys Research & Mfg. Corp.	34-32 57th St, Woodside 77	NY
Alloys Unlimited, Inc.	23-01 43rd Ave, LIC 1	NY
AMERICAN POTASH & CHEM. CORP., Adv Pg 184	3000 W 6th St, Los Angeles 54	Cal
Atlas Titanium, Ltd.	Centre St, Welland, Ont.	Can
Bram Metallurgical-Chemical Co.	820 46th Ave, Philadelphia 26	Pa
Chemical Commerce	123 Sussex Ave, Newark 4	NJ
Chicago Development Corp.	5201 47th Ave, Riverside	Ill
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 208	Great Barrington	Mass
du Pont de Nemours & Co. Inc., E. I.	Wilmington 98	Del
Fansteel Metallurgical Corp.	North Chicago	Ill
General Electric Co. Lamp Metals & Components Dept.	21800 Tungsten Rd, Cleveland 17	Ohio
HARVEY ALUMINUM, Adv Pg 19	19200 S Western Ave, Torrance	Cal
Haynes Stellite Co. Div. of UCC	270 Park Ave, New York 17	NY
Kawecki Chemical Co, Inc.	220 E 42nd St, New York	NY
Kennametal Inc.	Latrobe	Pa
Kuhlmann, Ets.	25 bd de l'Amiral-Bruix, Paris 16e	Fr
Mackay, Inc., A. D.	100 Broadway, New York 38	NY
Mallinckrodt Chemical Works	2nd & Mallinckrodt Sts, St. Louis 7	Mo
Metal Hydrides Inc.	12-04 Congress St, Beverly	Mass
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. Adv Pg 2	Box 5936, Attleboro	Mass
Nuclear Fuels & Rare Metals Corp.	817 E 18th St, LA 21	Cal
Nuclear Metals, Inc.	Box 223 Concord	Mass
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Reactive Metals Inc. Sub. Hat Distillers & Chem. Corp	Niles	Ohio
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
Shieldalloy Corp.	Newfield	NJ
Stauffer Chemical Co.	380 Madison Ave, New York 17	NY
SYLCOR DIV. SYLVANIA ELEC PRODS. INC. Adv Pg 26	Centerpoint Rock Rd, Hicksville	NY
Torrance Brass Foundry, Inc	1825 W 213th St, Torrance	Cal
Union Carbide Metals Co. Div. UCC	270 Park Ave, New York 17	NY
Universal Cyclops Steel Corp.	Bridgeville	Pa
Vanadium Corp. of America	405 Lexington Ave, New York 17	NY
VAR-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St, New York 4	NY
VITRO CHEMICAL CO., Adv Pg 198	342 Madison Ave, New York 17	NY
WAH CHANG CORP., Adv Pg 123	233 Broadway, New York 7	NY
WESTINGHOUSE ELEC. CORP. MATERIALS MFG. Adv. Pgs. 70, 71	Blairsville	Pa

PALLADIUM

Alloys Unlimited, Inc.	23-01 43rd Ave, LIC 1	NY
Bishop & Co., J., Platinum Works	Malvern	Pa
Bram Metallurgical-Chemical Co.	820 46th Ave, Philadelphia 26	Pa
Chemical Commerce	123 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Cohn Corp., Sigmund	121 S Columbia Ave, Mt. Vernon	NY
Consolidated Reactive Metals, Inc.	115 Hoyt St, Mamaroneck	NY
Degussa	Box 3860 Frankfurt/Main	Ger
Delta Chemical Works	23 W 60 St, New York 23	NY
Engelhard Industries, Inc.	113 Astor St, Newark 2	NJ
Mackay, Inc., A. D.	100 Broadway, New York 38	NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. Adv Pg 2	Box 5936, Attleboro	Mass
NATIONAL LEAD CO. Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
VAR-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St, New York 4	NY
Western Gold & Platinum Co.	525 Harbor Blvd, Belmont	Cal

PLATINUM

Alloys Unlimited, Inc.	23-01 43rd Ave, LIC 1	NY
Bishop & Co., J., Platinum Works	Malvern	Pa
Bram Metallurgical-Chemical Co.	820 46th Ave, Philadelphia 26	Pa
Chemical Commerce	123 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Cohn Corp., Sigmund	121 S Columbia Ave, Mt. Vernon	NY
Consolidated Reactive Metals, Inc.	115 Hoyt St, Mamaroneck	NY
Degussa	Box 3860 Frankfurt/Main	Ger
Delta Chemical Works	23 W 60 St, New York 23	NY
Engelhard Industries, Inc.	113 Astor St, Newark 2	NJ
Fleischman, Emil & Co. Inc.	1271 Ave. of America, New York 20	NY
Mackay, Inc., A. D.	100 Broadway, New York 38	NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS, INC. Adv Pg 2	Box 5936, Attleboro	Mass
NATIONAL LEAD CO. Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
VAR-LAC-OID CHEMICAL CO., Adv Pg 241	116 Broad St, New York 4	NY
Western Gold & Platinum Co.	525 Harbor Blvd, Belmont	Cal

PLUTONIUM

Delta Chemical Works	23 W 60 St, New York 23	NY
Nuclear Fuels & Rare Metals Corp.	817 E 18th St, LA 21	Cal
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1000 Vernon St, Apollo	Pa
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	25 Bd G. Clemenceau, Courbevoie, Seine	Fr
Stanocast Div. Chemalloy Div.	169 Weston Hwy, West Hyack	NY
UNITED NUCLEAR CORP., Adv Pg 24	365 Winchester Ave, New Haven 4	Conn

POLONIUM

Delta Chemical Works	23 W 60 St, New York 23	NY
U. S. RADIUM CORP., Adv Pg 186	Box 240, Morristown	NJ

POTASSIUM

City Chemical Corp.	132 W 22nd St, New York 11	NY
Degussa	Box 3860 Frankfurt/Main	Ger
Delta Chemical Works	23 W 60 St, New York 23	NY
Kuhlmann, Ets.	25 bd de l'Amiral-Bruix, Paris 16e	Fr

NIA Newark City	Kearny	Pa
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Mallinckrodt Chemical Works	2nd & Mallinckrodt Sts, St. Louis 7	Mo
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St, New York 4	NY

PRASEODYMIUM

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
AMERICAN POTASH & CHEM. CORP.,		
Adv Pg 194	3600 W 6th St, Los Angeles 54	Cal
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 38	Pa
Carbon Metals & Alloys Div. Roman Metals Corp.	45-61 Manufacturers Pl, Newark 5	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV.		
Adv Pg 119	St. Louis	Mich
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
Sintercast Div, Chemalloy Div.	169 Weston Hwy, West Nyack	NY
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St, New York 4	NY
VITRO CHEMICAL CO., Adv Pg 198	342 Madison Ave, New York 17	NY

RADIUM

Delta Chemical Works	23 W 60 St, New York 23	NY
Instrumentex Inc.	Box 5565, Tulsa	Okla
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
NARDIN CHEMICAL CO. INC. Adv Pg 12	161 E 42nd St, New York 17	NY
U. S. NUCLEAR CORP., Adv Pg 127	801 N Lake St, Box 2022, Burbank	Cal
U. S. RADIUM CORP., Adv Pg 186	Box 346, Morristown	NJ

RHENIUM

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 38	Pa
Chase Brass & Copper Co.	236 Grand St, Waterbury	Conn
Chemical Commerce	223 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.		
Adv Pg 2	Box 5936, Attleboro	Mass
Semi-Alloys Inc	50 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
Shieldalloy Corp.	Newfield	NJ
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St, New York 4	NY

RUBIDIUM

AMERICAN POTASH & CHEM. CORP.,		
Adv Pg 194	3600 W 6th St, Los Angeles 54	Cal
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 38	Pa
Chemical Commerce	223 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
Fairmont Chemical Co.	136 Liberty St, New York 6	NY
Kawecki Chemical Co. Inc.	220 E 42nd St, New York	NY
NIA Newark City	Kearny	Pa
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Penn Rare Metals, Inc.	Box 1-A, Revere	Pa
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa

SAMARIUM

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
AMERICAN POTASH & CHEM. CORP.,		
Adv Pg 194	3600 W 6th St, Los Angeles 54	Cal
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 38	Pa
Carbon Metals & Alloys Div. Roman Metals Corp.	45-61 Manufacturers Pl, Newark 5	NJ
Chemical Commerce	223 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
General Astronautics Corp.	320 Yonkers Ave, Yonkers 2	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV.		
Adv Pg 119	St. Louis	Mich
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Reactor Materials Inc.	Box 475, Penfield	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
Sintercast Div, Chemalloy Div.	169 Weston Hwy, West Nyack	NY
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St, New York 4	NY
Vitro Corp. of America	261 Madison Ave, New York 16	NY

SELENIUM

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
AMERICAN SMELTING & REFINING CO.,		
Adv Pg 67	120 Broadway, New York 5	NY
Belmont Smelting & Refining Works, Inc.	252 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 38	Pa
Cerro Sales Corp.	300 Park Ave, New York 22	NY
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
Fairmont Chemical Co.	136 Liberty St, New York 6	NY
Kawecki Chemical Co. Inc.	220 E 42nd St, New York	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Penn Rare Metals, Inc.	Box 1-A, Revere	Pa
Semi-Alloys Inc	50 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St, New York 4	NY

SILICON

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
Alpha Metals, Inc.	608 Water St, Jersey City 4	NJ
Belmont Smelting & Refining Works, Inc.	252 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 38	Pa
Chase Brass & Copper Co.	236 Grand St, Waterbury	Conn
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
Dow Corning Corp.	Midland	Mich
du Pont de Nemours & Co. Inc., E. I.	Wilmington 98	Del
Eagle-Picher Co.	American Bldg, Cincinnati 1	Ohio
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Mallinckrodt Chemical Works	2nd & Mallinckrodt Sts, St. Louis 7	Mo
Monsanto Chemicals Ltd.	10/18 Victoria St, London SW1, Eng	
Nuclear Fuels & Rare Metals Corp.	817 E 10th St, LA 21	Cal
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Semi-Alloys Inc	50 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
SHIN-ETSU CHEMICAL CO. LTD.	24 Ekiho Shymoto-cho, Minato-ku, Tokyo	Jap
Standard Tel. & Cables Ltd.	29 Glasshouse Yd, London EC 1	Eng
Sylvania Elec Prods Inc. Chem & Met Div.	Towanda	Pa
Texas Instruments Incorporated, Treasure Div.	Box 5936, Dallas 31	Tex
Union Carbide Metals Co. Div. UCC	270 Park Ave, New York 17	NY
Vanadium Corp. of America	420 Lexington Ave, New York 17	NY
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St, New York 4	NY

SILVER

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
Alpha Metals, Inc.	608 Water St, Jersey City 4	NJ
AMERICAN SMELTING & REFINING CO.,		
Adv Pg 67	120 Broadway, New York 5	NY
Belmont Smelting & Refining Works, Inc.	252 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 38	Pa
Cerro Sales Corp.	300 Park Ave, New York 22	NY
Chemical Commerce	223 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Cohn Corp., Sigmund	121 S Columbus Ave, Mt. Vernon	NY
Consolidated Reactive Metals, Inc.	115 Hoyt St, Mamaroneck	NY
Degussa	Box 3860 Frankfurt/Main	Ger
Delta Chemical Works	23 W 60 St, New York 23	Ny
Engelhard Industries, Inc.	113 Astor St, Newark 5	NJ
Handy & Harman	850 Third Ave, New York 22	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Mallinckrodt Chemical Works	2nd & Mallinckrodt Sts, St. Louis 7	Mo
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.		
Adv Pg 2	Box 5936, Attleboro	Mass
NATIONAL LEAD CO. Adv. Pgs. 88, 89	111 Broadway, New York 6	NY
Semi-Alloys Inc	50 N Macquesten Pkwy, Mt. Vernon	NY
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St, New York 4	NY
Western Gold & Platinum Co.	555 Harbor Blvd, Belmont	Cal

SILVER-CADMIUM-INDIUM

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
Alpha Metals, Inc.	608 Water St, Jersey City 4	NJ
AMERICAN SMELTING & REFINING CO.,		
Adv Pg 67	120 Broadway, New York 5	NY
Belmont Smelting & Refining Works, Inc.	252 Belmont Ave, Brooklyn 7	NY
Consolidated Reactive Metals, Inc.	115 Hoyt St, Mamaroneck	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 288	Great Barrington	Mass
Handy & Harman	850 Third Ave, New York 22	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
NATIONAL LEAD CO. Adv. Pgs. 88, 89	111 Broadway, New York 6	NY
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),		
Adv. Pgs. 217, 219, 221	1988 Nevin St, Apollo	Pa
Semi-Alloys Inc	50 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
SYLVANIA ELEC. PRODS. INC.		
Adv Pg 28	Centraque Rock Rd, Hicksville	NY
UNITED NUCLEAR CORP., Adv Pg 98	563 Westconnie Ave, New Haven 2	Conn
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St, New York 4	NY

SODIUM

City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY
du Pont de Nemours & Co. Inc., E. I.	Wilmington 98	Del
Ethyl Corp.	100 Park Ave, New York 17	NY
Kuhlmann, Ets.	25 bd de l'Amiral-Bruix, Paris 16e	Fr
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Mallinckrodt Chemical Works	Second & Mallinckrodt Sts, St. Louis 7	Mo
Semi-Alloys Inc	50 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
SHIN-ETSU CHEMICAL CO. LTD. Adv Pg 112-G	24 Ekiho Shymoto-cho, Minato-ku, Tokyo	Jap
USINE, Adv Pg 112-P	10 rue de General Foy, Paris 8	Fr
U.S. Industrial Chemicals Co. Div. Nat. Distillers & Chem Corp.	99 Park Ave, New York 16	NY

STEEL, CARBON

Bethlehem Steel Corp.	701 E 3rd St, Bethlehem	Pa
CARPENTER STEEL CO. Adv Pg 92	101 W Bern St, Reading	Pa
Crucible Steel Co. of America	Box 88, Pittsburgh 30	Pa
Delta Chemical Works	23 W 60 St, New York 23	NY
English Steel Corp. Ltd. Brass Zinc Wire	Sheffield 5, Yorkshire, England	
Firth-Durflex Stampings Ltd.	Darley Dale, Nr. Matlock, Derbyshire, Eng	
Firth Sterling Inc.	3113 Forbes Ave, Pittsburgh 30	Pa
Fox & Co Ltd, Samuel, Stocksbridge Wks	Sheffield, England	
Hadfields Ltd.	Vulcan Rd, Sheffield 9	Eng
HARVEY ALUMINUM, Adv Pg 39	19200 S Western Ave, Torrance	Cal
Jones & Laughlin Steel Corp.	3 Gateway Center, Pittsburgh 30	Pa
Kayser Ellison & Co. Ltd. Carlisle Steel Wks.	Sheffield, 4, England	
Lorraine-Escaut	7 Boul-Point Bagneul, Paris 18e	Fr
Latrobe Steel Co.	571 Latrobe Bldg, Connellsville	Pa
National Forge Co	Irvine, Warren City	Pa
PHOENIX-RHEINROHR AG, Adv Pg 27	August-Thyssen-Str 1, Duesseldorf	Ger
Reactive Metals Inc. Sub. Natl. Distillers & Chem Corp.	Niles	Ohio
Republic Steel Corp.	1441 Republic Bldg, Cleveland 1	Ohio
SHINSTAHL AG, Adv Pg 112-E	Neuhausen Str. 38, Wuppertal	Ger
Schoeller-Bleckmann Steel Wks Ltd.	2 Wildpretmarkt, Vienna 1	Aus
Superior Steel Div. Copperweld Steel Co.	Carnegie	Pa
SYLVAN DIV. SYLVANIA ELEC. PRODS. INC.		
Adv Pg 28	Centraque Rock Rd, Hicksville	NY
Trent Tube Co	East Troy	Wis
USINE, Adv Pg 112-P	10 rue de General Foy, Paris 8	Fr
Union Steel Corp.	1886 Oakwood Terr, Union	NJ
U. S. STEEL CORP., Adv. Pgs. 30, 31	525 Wm. Penn Pl, Pittsburgh 30	Pa
Universal Cyclops Steel Corp.	Bridgeville	Pa
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St, New York 4	NY
Wallingford Steel Co.	60 Valley St, Wallingford	Conn
Wentworth Foundry Co.	Lincoln Ave, Waukesha	Wis
Wisconsin Centrifugal Foundry, Inc.	905 E St, Paul Ave, Waukesha	Wis

STRONTIUM

Barium & Chemicals, Inc.	4643 Erie St, Willoughby	Ohio
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 38	Pa
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	23 W 60 St, New York 23	NY

Ying Laboratories, Inc.	117 Adar St, Syracuse 3	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Nuclear Fuels & Rare Metals Corp.	817 E 18th St, LA 21	Cal
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
VAR-LAC-DID CHEMICAL CO., Adv Pg 241	116 Broad St, New York 4	NY

TANTALUM

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
Associated Engrg. & Mfg. Corp.	210 Stonehouse Rd, Glen Ridge	NJ
Atlas Titanium, Ltd.	Centre St, Welland, Ont.	Can
Belmont Smelting & Refining Works, Inc.	202 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	600 65th Ave, Philadelphia 38	Pa
Bridgeport Brass Co.	30 Grand St, Bridgeport 2	Conn
Chemical Commerce	183 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	53 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 288	Great Barrington	Mass
Fromtec Metallurgical Corp.	North Chicago	Ill
General Automatch Corp.	280 Yonkers Ave, Yonkers 2	NY
HARVEY ALUMINUM, Adv Pg 59	19200 S Western Ave, Torrance	Cal
Haynes Stellite Co. Div. of UCC	270 Park Ave, New York 17	NY
Kawecki Chemical Co. Inc.	220 E 42nd St, New York	NY
Kennametal Inc.	Latrobe	Pa
LINDE CO. DIV. OF UCC, Adv Pg 125	270 Park Ave, New York 17	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Mallinckrodt Chemical Works	2nd & Mallinckrodt Sts, St. Louis 7	Mo
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. Adv Pg 2	Box 5936, Attleboro	Mass
Sintered Products Corp.	70 Memorial Dr, Cambridge 42	Mass
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1000 Vanore St, Apollo	Pa
Nuclear Metals, Inc.	Box 333 Concord	Mass
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, Seine	Fr
Semi-Alloys Inc	50 N Macquesten Pkwy, Mt. Vernon	NY
Shieldalloy Corp.	Newfield	NJ
SHOWA DENKO K. K., Adv Pg 112-G	34 Soto Hyusato-cho, Minato-ku, Tokyo	Jap
Stauffer Chemical Co.	380 Madison Ave, New York 17	NY
Torrance Brass Foundry, Inc	1815 W 213th St, Torrance	Cal
UNITED NUCLEAR CORP., Adv Pg 36	365 Westmoreland Ave, New Haven 4	Conn
Union Carbide Metals Co. Div. UCC	270 Park Ave, New York 17	NY
VAR-LAC-DID CHEMICAL CO., Adv Pg 241	116 Broad St, New York 4	NY
WAR CHARS CORP., Adv Pg 123	233 Broadway, New York 7	NY
WESTINGHOUSE ELEC. CORP. MATERIALS MFG. Adv. Pgs. 70, 71	Blairsville	Pa

TERBIUM

AMERICAN POTASH & CHEM. CORP., Adv Pg 104	3000 W 6th St, Los Angeles 54	Cal
Bram Metallurgical-Chemical Co.	600 65th Ave, Philadelphia 38	Pa
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	53 W 60 St, New York 23	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV. Adv Pg 118	St. Louis	Mich
Semi-Alloys Inc	50 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
Simonset Div. Chemalloy Div.	189 Western Hwy, West Nyack	NY
VITRO CHEMICAL CO., Adv Pg 198	342 Madison Ave, New York 17	NY

THORIUM
See Also SERV. & CONS'LT: THORIUM CONVERSION

AMERICAN POTASH & CHEM. CORP., Adv Pg 104	3000 W 6th St, Los Angeles 54	Cal
Associated Engrg. & Mfg. Corp.	210 Stonehouse Rd, Glen Ridge	NJ
Cerium Metals & Alloys Div. Vanson Metals Corp.	33-63 Manufacturers Pl, Newark 5	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	53 W 60 St, New York 23	NY
Grace & Co, W. R., Davison Chemical Div.	Erwin	Tenn
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Metal Hydrides, Inc.	19-24 Congress St, Beverly	Mass
NATIONAL LEAD CO. Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
Nuclear Fuels & Rare Metals Corp.	817 E 18th St, LA 21	Cal
Nukem, GmbH	Wolfgang bei Hanau/Main	Ger
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, Seine	Fr
RIO TINTO MINES CO. OF CANADA LTD. Adv Pg 122	320 Bay St, Toronto, Ont	Can
Semi-Alloys Inc	50 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
SHOWA DENKO K. K., Adv Pg 112-G	34 Soto Hyusato-cho, Minato-ku, Tokyo	Jap
Simonset Div. Chemalloy Div.	189 Western Hwy, West Nyack	NY
UNITED NUCLEAR CORP., Adv Pg 36	365 Westmoreland Ave, New Haven 4	Conn
VAR-LAC-DID CHEMICAL CO., Adv Pg 241	116 Broad St, New York 4	NY
VITRO CHEMICAL CO., Adv Pg 198	342 Madison Ave, New York 17	NY

THULIUM

AMERICAN POTASH & CHEM. CORP., Adv Pg 104	3000 W 6th St, Los Angeles 54	Cal
Bram Metallurgical-Chemical Co.	600 65th Ave, Philadelphia 38	Pa
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	53 W 60 St, New York 23	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV. Adv Pg 118	St. Louis	Mich
Semi-Alloys Inc	50 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
Simonset Div. Chemalloy Div.	189 Western Hwy, West Nyack	NY

TIN

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
Alpha Metals, Inc.	600 Water St, Jersey City 4	NJ
AMERICAN SMELTING & REFINING CO., Adv Pg 67	120 Broadway, New York 5	NY
Belmont Smelting & Refining Works, Inc.	202 Belmont Ave, Brooklyn 7	NY
CAMBRIDGE SMELTING CO. Adv Pg 238	166 Pacific St, Cambridge	Mass
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	53 W 60 St, New York 23	NY
Federated Metals Canada Ltd.	1600 Norman St, Lachine	Que
Fischel Co., Ernest L.	150 Broadway, New York 38	NY
LEAD PRODUCTS, INC. Adv Pg 238	Hartford Rd, Manchester	Conn
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Mallinckrodt Chemical Works	2nd & Mallinckrodt Sts, St. Louis 7	Mo
NATIONAL LEAD CO. Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
NUCLEAR, INC., Adv Pg 258	110 Pacific St, Cambridge	Mass
Reliance Incorporated	1210-1212 Adams Ave, Phila 24	Pa
Semi-Alloys Inc	50 N Macquesten Pkwy, Mt. Vernon	NY
VAR-LAC-DID CHEMICAL CO., Adv Pg 241	116 Broad St, New York 4	NY
WEBER & SONS, NYMAN, Adv Pg 64	1202 Semmes St, Box 1072, Richmond 3	Va

TITANIUM

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
AMERICAN POTASH & CHEM. CORP., Adv Pg 104	3000 W 6th St, Los Angeles 54	Cal
Atlas Titanium, Ltd.	Centre St, Welland, Ont.	Can
Belmont Smelting & Refining Works, Inc.	202 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	600 65th Ave, Philadelphia 38	Pa
Chemical Commerce	183 Sussex Ave, Newark 4	NJ
Chicago Development Corp.	6610 47th Ave, Riverdale	Md
City Chemical Corp.	132 W 22nd St, New York 11	NY
Crucible Steel Co. of America	Box 88, Pittsburgh 30	Pa
Degussa	Box 1003 Frankfurt/Main	Ger
Delta Chemical Works	53 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 288	Great Barrington	Mass
du Pont de Nemours & Co, Inc., E. I.	Wilmington 98	Del
Engelhard Industries, Inc.	113 Astor St, Newark 2	NJ
Firth-Sterling Sampling Ltd.	Darley Dale, Nr. Matlock, Derbyshire, Eng	
Foote Mineral Co.	18 W Chelten Ave, Phila 44	Pa
General Automatch Corp.	280 Yonkers Ave, Yonkers 2	NY
HARVEY ALUMINUM, Adv Pg 59	19200 S Western Ave, Torrance	Cal
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Metal Hydrides, Inc.	19-24 Congress St, Beverly	Mass
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. Adv Pg 2	Box 5936, Attleboro	Mass
NATIONAL LEAD CO. Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
Nuclear Metals, Inc.	Box 333 Concord	Mass
Nuclear Fuels & Rare Metals Corp.	817 E 18th St, LA 21	Cal
Nukem, GmbH	Wolfgang bei Hanau/Main	Ger
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, Seine	Fr
Reactive Metals Inc. Sub. Nat. Distillers & Chem. Corp.	Niles	Ohio
Republic Steel Corp.	1441 Republic Bldg, Cleveland 1	Ohio
Semi-Alloys Inc	50 N Macquesten Pkwy, Mt. Vernon	NY
Simonset Div. Chemalloy Div.	189 Western Hwy, West Nyack	NY
Superior Steel Div. Copperweld Steel Co.	Carnegie	Pa
Titanium Metals Corp. of America	233 Broadway New York 7	NY
Torrance Brass Foundry, Inc	1815 W 213th St, Torrance	Cal
Trent Tube Co	East Troy	Wis
USINE, Adv Pg 113-F	78 rue de General Foy, Paris 8	Fr
Union Carbide Metals Co. Div. UCC	270 Park Ave, New York 17	NY
Vanadium Corp. of America	420 Lexington Ave, New York 17	NY
VAR-LAC-DID CHEMICAL CO., Adv Pg 241	116 Broad St, New York 4	NY

TUNGSTEN

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
Associated Engrg. & Mfg. Corp.	210 Stonehouse Rd, Glen Ridge	NJ
Atlas Titanium, Ltd.	Centre St, Welland, Ont.	Can
Belmont Smelting & Refining Works, Inc.	202 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	600 65th Ave, Philadelphia 38	Pa
Chemical Commerce	183 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Climax Molybdenum Co. Div. Amer. Metal Climax Inc.	1270 Ave of the Americas, New York 20	NY
Delta Chemical Works	53 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 288	Great Barrington	Mass
Engelhard Industries, Inc.	113 Astor St, Newark 2	NJ
Fromtec Metallurgical Corp.	North Chicago	Ill
Firth Sterling Inc.	2113 Foden Ave, Pittsburgh 30	Pa
General Automatch Corp.	280 Yonkers Ave, Yonkers 2	NY
General Electric Co. Lamp Metals & Components Dept.	21800 Tungsten Rd, Cleveland 17	Ohio
HARVEY ALUMINUM, Adv Pg 59	19200 S Western Ave, Torrance	Cal
Haynes Stellite Co. Div. of UCC	270 Park Ave, New York 17	NY
Kennametal Inc.	Latrobe	Pa
Kulzinann, Ets.	55 bd de l'Amiral-Bruix, Paris 16e	Fr
LINDE CO. DIV. OF UCC, Adv Pg 125	270 Park Ave, New York 17	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Metco Ltd.	Chobham, Woking, Surrey	Eng
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1000 Vanore St, Apollo	Pa
Nuclear Metals, Inc.	Box 333 Concord	Mass
Oregon Metallurgical Corp.	Box 484, Albany	Ore
Semi-Alloys Inc	50 N Macquesten Pkwy, Mt. Vernon	NY
Shieldalloy Corp.	Newfield	NJ
Simonset Div. Chemalloy Div.	189 Western Hwy, West Nyack	NY
Stauffer Chemical Co.	380 Madison Ave, New York 17	NY
SYLVAN DIV. SYLVANIA ELEC PRODS. INC. Adv Pg 36	Cantiague Rock Rd, Hicksville	NY
Sylvania Elec Prods Inc. Chem & Met Div.	Towanda	Pa
Union Carbide Metals Co. Div. UCC	270 Park Ave, New York 17	NY
Universal Cyclops Steel Corp.	Bridgeville	Pa
Vacuum Technology, Inc.	7003 Gloria Ave, Van Nuys	Cal
VAR-LAC-DID CHEMICAL CO., Adv Pg 241	116 Broad St, New York 4	NY
WAR CHARS CORP., Adv Pg 123	233 Broadway, New York 7	NY
WESTINGHOUSE ELEC. CORP. MATERIALS MFG. Adv. Pgs. 70, 71	Blairsville	Pa

TUNGSTEN RIBBON

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
Associated Engrg. & Mfg. Corp.	210 Stonehouse Rd, Glen Ridge	NJ
Atlas Titanium, Ltd.	Centre St, Welland, Ont.	Can
Bram Metallurgical-Chemical Co.	600 65th Ave, Philadelphia 38	Pa
Cross Co., H.	2220 Bergenline Ave, Union City	NJ
Delta Chemical Works	53 W 60 St, New York 23	NY
General Electric Co. Lamp Metals & Components Dept.	21800 Tungsten Rd, Cleveland 17	Ohio
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Semi-Alloys Inc	50 N Macquesten Pkwy, Mt. Vernon	NY
Sylvania Elec Prods Inc. Chem & Met Div.	Towanda	Pa
VAR-LAC-DID CHEMICAL CO., Adv Pg 241	116 Broad St, New York 4	NY

URANIUM CARBIDE

American Metal Products Co.	6000 Lincoln Ave, Detroit 4	Mich
Carborundum Co. R & D Div	New Prob. Rt. 104C, Niagara Falls	NY
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	53 W 60 St, New York 23	NY
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. Adv Pg 202	Box 608, San Diego 12	Cal
Grace & Co, W. R., Davison Chemical Div.	Erwin	Tenn
Kulzinann, Ets.	55 bd de l'Amiral-Bruix, Paris 16e	Fr
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. Adv Pg 2	Box 5936, Attleboro	Mass
NATIONAL CARBON CO. DIV. OF UCC, Adv. Pgs. 96, 97	270 Park Ave, New York 17	NY
NATIONAL LEAD CO. Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1000 Vanore St, Apollo	Pa
Nuclear Metals, Inc.	Box 333 Concord	Mass
Nukem, GmbH	Wolfgang bei, Hanau/Main	Ger
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, Seine	Fr
SHOWA DENKO K. K., Adv Pg 112-G	34 Soto Hyusato-cho, Minato-ku, Tokyo	Jap
Spencer Chemical Co.	500 Dwight Bldg, Kansas City 5	Mo
UNITED NUCLEAR CORP., Adv Pg 36	365 Westmoreland Ave, New Haven 4	Conn
VAR-LAC-DID CHEMICAL CO., Adv Pg 241	116 Broad St, New York 4	NY
VITRO CHEMICAL CO., Adv Pg 198	342 Madison Ave, New York 17	NY
Vitro Corp. of America	261 Madison Ave, New York 16	NY

URANIUM—DEPLETED

American Metal Products Co.	6000 Lincoln Ave, Detroit 4	Mich
Delta Chemical Works	53 W 60 St, New York 23	NY
Grace & Co, W. R., Davison Chemical Div.	Erwin	Tenn
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. Adv Pg 2	Box 5936, Attleboro	Mass
NATIONAL LEAD CO. Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1000 Vanore St, Apollo	Pa
Nuclear Metals, Inc.	Box 333 Concord	Mass
Shattuck Chemical Co., G. W.	1801 S Bannock St, Denver 23	Colo
Spencer Chemical Co.	500 Dwight Bldg, Kansas City 5	Mo
SYLVAN DIV. SYLVANIA ELEC PRODS. INC. Adv Pg 36	Cantiague Rock Rd, Hicksville	NY
Torrance Brass Foundry, Inc	1815 W 213th St, Torrance	Cal
UNITED NUCLEAR CORP., Adv Pg 36	365 Westmoreland Ave, New Haven 4	Conn
VAR-LAC-DID CHEMICAL CO., Adv Pg 241	116 Broad St, New York 4	NY

URANIUM DIOXIDE
See Also SERV. & CONS'LT: URANIUM CONVERSION

American Metal Products Co.	6000 Lincoln Ave, Detroit 4	Mich
Carborundum Co. R & D Div	New Prob. Rt. 104C, Niagara Falls	NY

City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	53 W 60 St, New York 23	NY
DOMINION MINES LTD. Adv Pg 203	389 Bay St, Toronto 1	Can
Eldorado Mining & Refining Ltd.	John St, Port Hope, Ont	Can
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.		
Adv Pg 202	Box 608, San Diego 12	Cal
Grace & Co, W. R., Davison Chemical Div.	Erwin	Tenn
Kuhlmann, Ets.	55 bd de l'Amiral-Bruix, Paris 16e	Fr
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
METALS & CONTROLS DIV. DIV. TEXAS INSTRUMENTS INC.		
Adv Pg 2	Box 898, Attleboro	Mass
NATIONAL LEAD CO. Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
Norton Co.	1 New Bond St, Worcester 6	Mass
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),		
Adv. Pgs. 217, 219, 221	1980 Warren St, Apollo	Pa
Nuclear Metals, Inc.	Box 333 Concord	Mass
Nukem, GmbH	Wolfgang am, Hanau/Main	Ger
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Shattuck Chemical Co., S. W.	1801 S Bannock St, Denver 23	Colo
Spencer Chemical Co.	500 Dwight Bldg, Kansas City 5	Mo
SYLCOR DIV. SYLVANIA ELEC PRODS. INC.		
Adv Pg 26	Centrapo Rock Rd, Hicksville	NY
UGINE, Adv Pg 113-P	10 rue du General Foy, Paris 8	Fr
UNITED NUCLEAR CORP., Adv Pg 36	365 Winchester Ave, New Haven 4	Conn
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St, New York 4	NY

URANIUM DISPERSIONS
See Also SERV. & CONS'LT: URANIUM CONVERSION

American Metal Products Co.	5960 Lindale Ave, Detroit 4	Mich
Delta Chemical Works	53 W 60 St, New York 23	NY
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.		
Adv Pg 202	Box 608, San Diego 12	Cal
Grace & Co, W. R., Davison Chemical Div.	Erwin	Tenn
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.		
Adv Pg 2	Box 898, Attleboro	Mass
NATIONAL CARBON CO. DIV. OF UCC,		
Adv. Pgs. 96, 97	270 Park Ave, New York 17	NY
NATIONAL LEAD CO. Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),		
Adv. Pgs. 217, 219, 221	1980 Warren St, Apollo	Pa
Nuclear Metals, Inc.	Box 333 Concord	Mass
Nukem, GmbH	Wolfgang am, Hanau/Main	Ger
SHOWA DENKO K. K., Adv Pg 113-Q	34 Shiba Miyamoto-cho, Minato-ku, Tokyo	Jap
SYLCOR DIV. SYLVANIA ELEC PRODS. INC.		
Adv Pg 26	Centrapo Rock Rd, Hicksville	NY
UNITED NUCLEAR CORP., Adv Pg 36	365 Winchester Ave, New Haven 4	Conn

URANIUM—ENRICHED
See Also SERV. & CONS'LT: URANIUM CONVERSION

American Metal Products Co.	5960 Lindale Ave, Detroit 4	Mich
Grace & Co, W. R., Davison Chemical Div.	Erwin	Tenn
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS, INC.		
Adv Pg 2	Box 898, Attleboro	Mass
NATIONAL LEAD CO. Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
Nuclear Metals, Inc.	Box 333 Concord	Mass
Nukem, GmbH	Wolfgang am, Hanau/Main	Ger
Spencer Chemical Co.	500 Dwight Bldg, Kansas City 5	Mo
SYLCOR DIV. SYLVANIA ELEC PRODS. INC.		
Adv Pg 26	Centrapo Rock Rd, Hicksville	NY
UNITED NUCLEAR CORP., Adv Pg 36	365 Winchester Ave, New Haven 4	Conn
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St, New York 4	NY

URANIUM—NATURAL
See Also SERV. & CONS'LT: URANIUM CONVERSION

American Metal Products Co.	5960 Lindale Ave, Detroit 4	Mich
Delta Chemical Works	53 W 60 St, New York 23	NY
DOMINION MINES LTD. Adv Pg 203	389 Bay St, Toronto 1	Can
Eldorado Mining & Refining Ltd.	John St, Port Hope, Ont	Can
Grace & Co., W. R. Davison Chemical Div.	Erwin	Tenn
Industrielle des Minerais de l'Ouest,		
Ste. (SIMO)	55 bd de l'Amiral Bruix, Paris 16e	Fr
Kuhlmann, Ets.	55 bd de l'Amiral-Bruix, Paris 16e	Fr
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS. INC.		
Adv Pg 2	Box 898, Attleboro	Mass
NATIONAL LEAD CO. Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
Nuclear Metals, Inc.	Box 333 Concord	Mass
Nukem, GmbH	Wolfgang am, Hanau/Main	Ger
RIO TINTO MINING CO. OF CANADA LTD.		
Adv Pg 122	320 Bay St, Toronto, Ont.	Can
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Shattuck Chemical Co., S. W.	1801 S Bannock St, Denver 23	Colo
Spencer Chemical Co.	500 Dwight Bldg, Kansas City 5	Mo
SYLCOR DIV. SYLVANIA ELEC PRODS. INC.		
Adv Pg 26	Centrapo Rock Rd, Hicksville	NY
Torrance Brass Foundry, Inc	1825 W 215th St, Torrance	Cal
UNITED NUCLEAR CORP., Adv Pg 36	365 Winchester Ave, New Haven 4	Conn
U. S. NUCLEAR CORP., Adv Pg 127	801 N Lake St, Box 2022, Burbank	Cal
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St, New York 4	NY
VITRO CHEMICAL CO., Adv Pg 198	342 Madison Ave, New York 17	NY

VANADIUM

Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 26	Pa
Chicago Development Corp.	5610 47th Ave, Riverdale	Md
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	53 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 200	Great Barrington	Mass
Fairmont Chemical Co.	136 Liberty St, New York 6	NY
Heyden Stellite Co. Div. of UCC	270 Park Ave, New York 17	NY
Kuhlmann, Ets.	55 bd de l'Amiral-Bruix, Paris 16e	Fr
LINDE CO. DIV. OF UCC, Adv Pg 133	270 Park Ave, New York 17	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Nuclear Fuels & Rare Metals Corp.	817 E 18th St, LA 21	Cal
Nuclear Metals, Inc.	Box 333 Concord	Mass
Oregon Metallurgical Corp.	Box 484, Albany	Ore
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Shieldalloy Corp.	Newfield	NJ
SHOWA DENKO K. K., Adv Pg 113-Q	34 Shiba Miyamoto-cho, Minato-ku, Tokyo	Jap
Torrance Brass Foundry, Inc	1825 W 215th St, Torrance	Cal
Union Carbide Metals Co. Div. UCC	270 Park Ave, New York 17	NY
Vanadium Corp. of America	420 Lexington Ave, New York 17	NY
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St, New York 4	NY

YTTERBIUM

AMERICAN POTASH & CHEM. CORP.,		
Adv Pg 104	3000 W 6th St, Los Angeles 54	Cal
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 26	Pa
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	53 W 60 St, New York 23	NY
Fairmont Chemical Co.	136 Liberty St, New York 6	NY
General Aromatents Corp.	200 Yonkers Ave, Yonkers 2	NY
Mackay, Inc, A. D.	198 Broadway, New York 38	NY
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV.		
Adv Pg 118	St. Louis	Mich
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
Stancrest Div. Chromalloy Div.	169 Western Hwy, West Nyack	NY
VITRO CHEMICAL CO., Adv Pg 198	342 Madison Ave, New York 17	NY

YTTRIUM

AMERICAN POTASH & CHEM. CORP.,		
Adv Pg 104	3000 W 6th St, Los Angeles 54	Cal
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 26	Pa
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	53 W 60 St, New York 23	NY
Fairmont Chemical Co.	136 Liberty St, New York 6	NY
General Aromatents Corp.	200 Yonkers Ave, Yonkers 2	NY
Grace & Co., W. R. Davison Chemical		
Div.	Box 188, Pompton Plains	NJ
Mackay, Inc, A. D.	198 Broadway, New York 38	NY
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV.		
Adv Pg 118	St. Louis	Mich
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
Torrance Brass Foundry, Inc	1825 W 215th St, Torrance	Cal
VITRO CHEMICAL CO., Adv Pg 198	342 Madison Ave, New York 17	NY

ZINC

Alloys Research & Mfg. Corp.	34-32 57th St, Woodside 77	NY
Allers Dalimind, Inc.	32-01 43rd Ave, LIC 1	NY
AMERICAN SMELTING & REFINING CO.,		
Adv Pg 67	120 Broadway, New York 5	NY
Baker Chemical Co., J. T.	Phillipsburg	NJ
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Cerro Sales Corp.	300 Park Ave, New York 22	NY
City Chemical Corp.	132 W 22nd St, New York 11	NY
Delta Chemical Works	53 W 60 St, New York 23	NY
Eagle-Picher Co.	American Bldg, Cincinnati 1	Ohio
Fermont Metals Canada Ltd.	3400 Norman St, Lachine	Que
Fischel Co., Ernest L.	150 Broadway, New York 38	NY
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Mallinckrodt Chemical Works	2nd & Mallinckrodt Sts, St. Louis 7	Mo
NATIONAL LEAD CO. Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
Overpelt Lommel & de Campaine SA,		
rue des Metaux	54 rue des Fabriques, Brussels	Belg
Reynolds Incorporated	1210-1212 Adams Ave, Phila 26	Pa
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St, New York 4	NY
WERNER & SOHN, STAHL, Adv Pg 68	3300 Kanter St, Box 272, Richmond 2	Va

ZIRCALOY

Allegheny Ludlum Steel Corp.	Oliver Bldg, Pittsburgh 22	Pa
Alloys Research & Mfg. Corp.	34-32 57th St, Woodside 77	NY
Atlas Titanium, Ltd.	Centre St, Welland, Ont.	Can
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 26	Pa
Bridgeport Brass Co.	30 Grand St, Bridgeport 2	Conn
Carborundum Metals Co.	Akron	NY
Chase Brass & Copper Co.	236 Grand St, Waterbury	Conn
Columbia National Corp.	1 Gateway Center, Pittsburgh	Pa
Delta Chemical Works	53 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 200	Great Barrington	Mass
General Electric Co. Metallurgical		
Prods. Dept.	11177 E 8 Mile Rd, Detroit 32	Mich
HARVEY ALUMINUM, Adv Pg 39	19300 S Western Ave, Torrance	Cal
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Metal Hydrides Inc.	15-24 Congress St, Beverly	Mass
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.		
Adv Pg 2	Box 898, Attleboro	Mass
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),		
Adv. Pgs. 217, 219, 221	1980 Warren St, Apollo	Pa
Nuclear Metals, Inc.	Box 333 Concord	Mass
Oregon Metallurgical Corp.	Box 484, Albany	Ore
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Pittsburgh Plate Glass Co.	632 Fort Duquesne Blvd, Pittsburgh 22	Pa
Reactive Metals Inc. Sub. Natl. Distillers		
& Chem Corp.	Niles	Ohio
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Superior Steel Div. Copperweld Steel Co.	Carnegie	Pa
SYLCOR DIV. SYLVANIA ELEC PRODS. INC.		
Adv Pg 26	Centrapo Rock Rd, Hicksville	NY
Torrance Brass Foundry, Inc	1825 W 215th St, Torrance	Cal
UGINE, Adv Pg 113-P	10 rue du General Foy, Paris 8	Fr
UNITED NUCLEAR CORP., Adv Pg 36	365 Winchester Ave, New Haven 4	Conn
Universal Cyclops Steel Corp.	Bridgeville	Pa
WESTINGHOUSE ELEC. CORP. MATERIALS MFG.		
Adv. Pgs. 70, 71	Blairsville	Pa

ZIRCONIUM

Allegheny Ludlum Steel Corp.	Oliver Bldg, Pittsburgh 22	Pa
Alloys Research & Mfg. Corp.	34-32 57th St, Woodside 77	NY
Atlas Titanium, Ltd.	Centre St, Welland, Ont.	Can
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 26	Pa
Bridgeport Brass Co.	30 Grand St, Bridgeport 2	Conn
Carborundum Metals Co.	Akron	NY
Chase Brass & Copper Co.	236 Grand St, Waterbury	Conn
Chemical Concentrates	123 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St, New York 11	NY
Columbia National Corp.	1 Gateway Center, Pittsburgh	Pa
Degussa	Box 3993 Frankfurt/Main	Ger
Delta Chemical Works	53 W 60 St, New York 23	NY
DRESSER PRODUCTS, INC. Adv Pg 200	Great Barrington	Mass
Engelhard Industries, Inc.	113 Astor St, Newark 2	NJ
Foote Mineral Co.	18 W Chelten Ave, Phila 44	Pa
General Aromatents Corp.	200 Yonkers Ave, Yonkers 2	NY
HARVEY ALUMINUM, Adv Pg 39	19300 S Western Ave, Torrance	Cal
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
Metal Hydrides, Inc.	15-24 Congress St, Beverly	Mass
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.		
Adv Pg 2	Box 898, Attleboro	Mass
Nuclear Fuels & Rare Metals Corp.	817 E 18th St, LA 21	Cal
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),		
Adv. Pgs. 217, 219, 221	1980 Warren St, Apollo	Pa
Nuclear Metals, Inc.	Box 333 Concord	Mass
Oregon Metallurgical Corp.	Box 484, Albany	Ore
PECHINEY, Adv Pg 199	23 Rue Balzac, Paris, 8ème	Fr
Pittsburgh Plate Glass Co.	632 Fort Duquesne Blvd, Pittsburgh 22	Pa
Reactive Metals Inc. Sub. Natl. Distillers		
& Chem Corp.	Niles	Ohio
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Superior Steel Div. Copperweld Steel Co.	Carnegie	Pa
Torrance Brass Foundry, Inc	1825 W 215th St, Torrance	Cal
UGINE, Adv Pg 113-P	10 rue du General Foy, Paris 8	Fr
UNITED NUCLEAR CORP., Adv Pg 36	365 Winchester Ave, New Haven 4	Conn
VAR-LAC-OID CHEMICAL CO.,		
Adv Pg 241	116 Broad St, New York 4	NY
VITRO CHEMICAL CO., Adv Pg 198	342 Madison Ave, New York 17	NY
WAH CHANG CORP., Adv Pg 128	233 Broadway, New York 7	NY
Wallingford Steel Co.	80 Valley St, Wallingford	Conn

METALS—ALLOY, HIGH-DENSITY

Alpha Metals, Inc.	600 Water St, Jersey City 4	NJ
AMERICAN SMELTING & REFINING CO.,		
Adv Pg 67	120 Broadway, New York 5	NY
Atlas Titanium, Ltd.	Centre St, Welland, Ont.	Can
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Belton & Sons Ltd., Thomas	169 Regent St, London W1	Eng
Bram Metallurgical-Chemical Co.	820 65th Ave, Philadelphia 26	Pa
Cerro Sales Corp.	300 Park Ave, New York 22	NY
Crucible Steel Co. of America	Box 88, Pittsburgh 30	Pa
Delta Chemical Works	53 W 60 St, New York 23	NY
Ethyl Corp.	100 Park Ave, New York 17	NY
General Electric Co. Lamp Metals &		
Components Dept.	21800 Tungsten Rd, Cleveland 17	Ohio
Grace & Co., W. R. Davison Chemical Div.	Erwin	Tenn
Haynes Stellite Co. Div. of UCC	270 Park Ave, New York 17	NY
Hunterscroft Inc.	Latrobe	Pa
Kinney Mills Inc.	29-15 Borden Ave, LIC	NY
Latrobe Steel Co.	471 Latrobe Bldg, Connellsville	Pa
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.		
Adv Pg 2	Box 898, Attleboro	Mass
NATIONAL LEAD CO. Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),		
Adv. Pgs. 217, 219, 221	1980 Warren St, Apollo	Pa
Nuclear Metals, Inc.	Box 333 Concord	Mass
Reactor Materials Inc.	Box 412, Peekskill	NY
Revere Copper & Brass Inc.	230 Park Ave, New York 17	NY
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa

Sandoz Chemical Co.	200 Madison Ave, New York 17	NY
Trent Tube Co	East Troy	Wis
U. S. STEEL CORP., Adv. Pgs. 50, 51	525 Wm. Penn Pl. Pittsburgh 30	Pa
Universal Cyclops Steel Corp.	Bridgeville	Pa
VAN LAC-ISO CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY
Western Gold & Platinum Co.	555 Harbor Blvd, Belmont	Cal
WESTINGHOUSE ELEC. CORP. MATERIALS MFG. Adv. Pgs. 70, 71	Blairsville	Pa
Wisconsin Centrifugal Foundry, Inc.	806 E St. Paul Ave. Waukesha	Wis

METALS - LAMINATED

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
Alpha Metals, Inc.	60R Water St. Jersey City 4	NJ
AMERICAN SMELTING & REFINING CO., Adv Pg 67	120 Broadway, New York 5	NY
BARCICK & WILCOP CO. Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
BAR-RAY PRODUCTS, INC. Adv Pg 12	208 25th St. Brooklyn 32	NY
Bridgeport Brass Co.	30 Grand St. Bridgeport 8	Conn
BROOKS & PERKINS, Adv Pg 114	1920 W Fort St. Detroit 16	Mich
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. Adv Pg 282	Box 608, San Diego 12	Cal
Hanson-Angel Co.	129 Bank St. Attleboro	Mass
Knapp Mills Inc.	23-15 Borden Ave, LIC	NY
Robinson, Fr.	55 bd de l'Amiral-Bruix, Paris 16e	Fr
Lorraine-Escaut	7 Rond-Point Bugeaud, Paris 16e	Fr
Lukens Steel Co.	457 Lukens Bldg, Coatesville	Pa
Mackay, Inc, A. D.	150 Broadway, New York 38	NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. Adv Pg 2	Box 936, Attleboro	Mass
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1000 Vermo St. Apollo	Pa
Nuclear Metals, Inc.	Box 222 Concord	Mass
Pacific Metals, Inc.	PL 40 Rd, Flushing 68	NY
Revere Copper & Brass Inc.	230 Park Ave, New York 17	NY
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
USINE, Adv Pg 112-P	91 rue de General Foy, Paris 8	Fr
Vacuum Technology, Inc.	7953 Gloria Ave, Van Nuys	Cal

METALS - LEAD-SURFACED

Alpha Metals, Inc.	60R Water St, Jersey City 4	NJ
AMERICAN SMELTING & REFINING CO., Adv Pg 67	120 Broadway, New York 5	NY
BAR-RAY PRODUCTS, INC. Adv Pg 12	209 25th St. Brooklyn 32	NY
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Kelley & Co., O. G.	66 Taylor St, Boston 22	Mass
Lead Fabricators, Inc	25 Belgrove Dr, Kearny	NJ
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. Adv Pg 2	Box 936, Attleboro	Mass
NATIONAL LEAD CO. Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
PACIFIC COAST ENGINEERING CO. Adv Pg 289	Drawer E, Alameda	Cal
RAY-PROOF CORP. Adv Pg 230	843 Canal St. Stamford	Conn
Revere Copper & Brass Inc.	230 Park Ave, New York 17	NY
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY

METALS - LIQUID

See Specific Metal Under METALS, ALLOYS & COMPOUNDS

METALS - POWDERED

Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
Aluminum Co. of America	1501 Alcoa Bldg, Pittsburgh 19	Pa
Amax Chemicals, Div. Gen Anil, & Film Corp.	435 Hudson St, New York 14	NY
Associated Engg. & Mfg. Corp.	210 Stonehouse Rd, Glen Ridge	NJ
Atlas Titanium, Ltd.	Centre St, Welland, Ont.	Can
Belmont Smelting & Refining Works, Inc.	322 Belmont Ave, Brooklyn 7	NY
Bram Metallurgical Chemical Co.	850 65th Ave. Philadelphia 26	Pa
Carborundum Metals Co.	Akron	NY
Carlton Metals & Alloys Div. Ronson Metals Corp.	46-05 Manufacturers Pl. Newark 5	NJ
Chemical Commerce	123 Sussex Ave, Newark 4	NJ
City Chemical Corp.	132 W 22nd St. New York 11	NY
Cooper Metallurgical Associates	Box 1001, Cleveland 30	Ohio
Crucible Steel Co of America	Box 88, Pittsburgh 30	Pa
Curtiss-Wright Corp. Research Div.	Quehanna	Pa
Devonsco & Co., Ltd.	Great Dover St, London SE1, England	
DRESSER PRODUCTS, INC. Adv Pg 288	Grove Barrington	Mass
Eagle-Picher Co.	American Bldg, Cincinnati 1	Ohio
Federal-Mogul-Bower Bearings, Inc	11031 Shoemaker Ave, Detroit 13	Mich
Fulmetall Metals Canada Ltd.	1600 Norman St, Lachine	Que
Fischel Co., Ernest L.	100 Broadway, New York 38	NY
Fuze Mineral Co.	12 W Chelten Ave, Phila 44	Pa
General Astrometals Corp.	225 Varick Ave, Yonkers 1	NY
General Electric Co. Lamp Metals & Components Dept.	21000 Tungsten Rd. Cleveland 17	Ohio
Grace & Co., W. R. Davison Chemical Div.	Erwin	Tenn
Hayden Stellite Co. Div. of UCC	270 Park Ave, New York 17	NY
Kawecki Chemical Co. Inc.	220 E 42nd St, New York	NY
Hunnemeri Inc.	Lansdale	Pa
Kohlmann, Dr.	55 bd de l'Amiral-Bruix, Paris 16e	Fr
LINDE CO. DIV. OF UCC, Adv Pg 180	270 Park Ave, New York 17	NY
Mackay, Inc., A. D.	150 Broadway, New York 38	NY
Metal Hydrides, Inc.	13-34 Congress St, Beverly	Mass
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. Adv Pg 2	Box 936, Attleboro	Mass
Metals Disintegrating Co. Div. Armstrong-Marietta Co.	Box 350, Elizabeth 3	NJ
Metco Ltd.	Chobham, Woking, Surrey	Eng
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV. Adv Pg 119	St. Louis	Mich
National Moldite Co. Inc.	250 South St. Newark 5	NJ
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1000 Vermo St. Apollo	Pa
Nuclear Metals, Inc.	Box 222 Concord	Mass
Pacific Metals Corp.	3800 S Main St, Santa Ana	Cal
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
Shieldalloy Corp.	Newfield	NJ
SHOWA DENKO K. K., Adv Pg 112-G	34 Shiba Hyamato-cho, Minato-ku, Tokyo	Jap
Stanrecast Div. Chemetallay Div.	180 Varick Blvd, West Nyack	NY
SYLCOR DIV. SYLVANIA ELEC PRODS. INC. Adv Pg 38	Castiquay Rock Rd. Hicksville	NY
Sylvania Elec Prods Inc. Chem & Met Div.	Towanda	Pa
TOKYO SHIBAURA ELECTRIC CO. LTD. Adv Pg 225	12 Yonko-cho 1-Chome, Chiyoda-ku, Tokyo	Jap
Trent Tube Co	East Troy	Wis
Union-Carbide	30 rue de Bonher, Paris 8, France	
Union Carbide Metals Co. Div. UCC	270 Park Ave, New York 17	NY
Wall Colmonoy Corp. Stainless Processing Div.	19344 John R, St. Detroit 3	Mich
WESTINGHOUSE ELEC. CORP. MATERIALS MFG. Adv. Pgs. 70, 71	Blairsville	Pa

METAL - SPRAYING EQUIPMENT

Bath & Co. Ltd., F. W., Coatings Div.	Brent Cross, N Circular Rd. London NW10	Eng
Cesco Sales Corp.	200 Park Ave, New York 22	NY

LEPEL HIGH FREQUENCY LABS.

Adv Pg 30	34-18 37th Ave. Woodside	NY
Metco	1101 Prospect Ave. Westbury	NY
Metco Ltd.	Chobham, Woking, Surrey	Eng
Plasmadyne Corp	3820 E Miner St. Santa Ana	Cal
Sandoz Chemical Co. & Lt.	200 Madison Ave, New York 17	NY
Wall Colmonoy Corp. Stainless Processing Div.	19344 John R, St. Detroit 3	Mich

METALS - VACUUM-MELTED

Allegheny Ludlum Steel Corp.	Oliver Bldg. Pittsburgh 22	Pa
Alloys Unlimited, Inc.	21-01 43rd Ave, LIC 1	NY
Atlas Titanium, Ltd.	Centre St. Welland, Ont.	Can
Aux. Ets. Aubert & Duval	43 rue de Villiers, Neuilly-sur-Seine	Fr
Bethlehem Steel Corp.	701 E 3rd St, Bethlehem	Pa
Carborundum Metals Co.	Akron	NY
CARPENTER STEEL CO. Adv Pg 92	101 W Bern St. Reading	Pa
Combustion Engineering, Inc.	200 Madison Ave. New York 16	NY
Crucible Steel Co. of America	Box 88, Pittsburgh 30	Pa
DRESSER PRODUCTS, INC. Adv Pg 288	Grove Barrington	Mass
Driver Co., Wilbur B.	1875 McCarter Hwy, Newark 4	NJ
Eldorado Mining & Refining Ltd.	John St. Port Hope, Ont	Can
Firth-Derihon Stampings Ltd.	Derley Dale, No. Matlock, Derbyshire, Eng	
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. Adv Pg 282	Box 608, San Diego 12	Cal
General Electric Co. Metallurgical Prods. Dept.	11177 E 8 Mile Rd. Detroit 32	Mich
Grace & Co., W. R. Davison Chemical Div.	Erwin	Tenn
Hayden Stellite Co. Div. of UCC	270 Park Ave, New York 17	NY
Kawecki Chemical Co. Inc.	220 E 42nd St, New York	NY
Kohlmann, Dr.	55 bd de l'Amiral-Bruix, Paris 16e	Fr
Lacroix Steel Co.	1966 Haller St. Lorraine	Pa
Mackay, Inc., A. D.	150 Broadway, New York 38	NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. Adv Pg 2	Box 936, Attleboro	Mass
Miles Hivolt Ltd	Old Shoreham Rd, Hassocks-by-Sea, Sussex	Eng
NATIONAL LEAD CO. Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
New York Air Brake Co	230 Park Ave. New York 17	NY
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1000 Vermo St. Apollo	Pa
Nuclear Metals, Inc.	Box 222 Concord	Mass
Oregon Metallurgical Corp.	Box 484, Albany	Ore
Reactive Metals Inc., Sub. Nat. Distillers & Chem Corp	Niles	Ohio
Republic Steel Corp.	1441 Republic Bldg. Cleveland 1	Ohio
Semi-Alloys Inc	20 N Macquesten Pkwy, Mt. Vernon	NY
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
SYLCOR DIV. SYLVANIA ELEC PRODS. INC. Adv Pg 38	Castiquay Rock Rd. Hicksville	NY
Trent Tube Co	East Troy	Wis
Union Carbide Metals Co. Div. UCC	270 Park Ave, New York 17	NY
Universal Cyclops Steel Corp.	Bridgeville	Pa
VAN LAC-ISO CHEMICAL CO., Adv Pg 241	116 Broad St. New York 4	NY
WESTINGHOUSE ELEC. CORP. MATERIALS MFG. Adv. Pgs. 70, 71	Blairsville	Pa

METERS

See Also AMMETERS
CONTROLS
GAGES
INDICATORS
VOLTMETERS

METERS - BTU

BAILEY METER CO. Adv Pg 69	29801 Euclid Ave. Wickliffe	Ohio
Bailey Meter Co. Ltd.	5010 St. Catherine St. W. Montreal, Que Can	
Bristol Co.	Box 1790 BBG, Waterbury 20	Conn
Dynatech Corp.	850 Massachusetts Ave. Cambridge 39	Mass
Fremland & Vigeolas, Ltd. Acton Lane Wks.	Chiswick, London W4	Eng
FOXBORO CO. Adv Pg 180	38 Neponset Ave. Foxboro	Mass
HAGAN CHEMICALS & CONTROLS, INC. Adv Pg 39	28 Neponset Ave. Foxboro	Mass
Hoffman-Bryant Inc.	Box 1346, Pittsburgh 30	Pa
Hoyt Corp.	Michigan City 60	Ind
Hubbak Electrical Instrument Co.	10601 Dupont Ave. Cleveland 8	Ohio
Helas Corp. of America	Bradford	Pa
Taylor Instrument Co.	38 Arnes St. Rochester 1	NY

METERS - CONDUCTIVITY

Bailey Meter Co. Ltd.	5010 St. Catherine St. W. Montreal, Que Can	
Bobbie Co., James G.	1316 Arch St. Philadelphia 7	Pa
Bristol Co.	Box 1790 BBG, Waterbury 20	Conn
Cambridge Instrument Co., Ltd.	10 Grosvenor Pl, London SW1, Eng	
Dynatech Corp.	850 Massachusetts Ave. Cambridge 39	Mass
Fremland & Vigeolas, Ltd. Acton Lane Wks.	Chiswick, London W4	Eng
FOXBORO CO. Adv Pg 180	38 Neponset Ave. Foxboro	Mass
HAGAN CHEMICALS & CONTROLS, INC. Adv Pg 39	Box 1346, Pittsburgh 30	Pa
Hastings-Raydist Inc.	Hewcomb Ave, Hampton	Va
Hubbak Electrical Instrument Co.	10601 Dupont Ave, Cleveland 8	Ohio
Industrial Instruments, Inc.	89 Commerce Rd. Dept. R, Cedar Grove	NJ
Kohl Scientific Instrument Corp.	Box 1168, El Cajon	Cal
Kulka & Co. Inc.	Box 816, Hartford 1	Conn
LANDSVERK ELECTROMETER CO. Adv Pg 210	641 Sunset Ave. Glendale 1	Cal
Leeds & Northrup Co.	4901 Stenton Ave. Phila 44	Pa
Lock & Co. Ltd., A. M.	Union St. Oldham, Lancs. England	
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 107	Eindhoven	Neth
Pye & Co. Ltd., W. G.	York St. Cambridge, England	
Siemens & Halske AG	Hauptverwaltung, 32, Karlstrasse, Germany	
Solar-Schell, Ltd.	Honeypot Ln, Stanmore, Middx	Eng
Unit Process Assemblies	88-15 37th Ave, Woodside 77	NY
Wayne Kerr Corp.	1833 Rosa St, Philadelphia 3	Pa

METERS - COUNTING-RATE

AEG, Adv Pg 113-A	Hackman, Frankfurt/Main Germany	
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, Adv Pg 112-O	Charleroi	Belg
Atomic-Barnstead Corp	111 W Jewel Ave, St. Louis 22	Mo
Automation, Inc. Div. C. W. Reed Co Inc.	6609 S Hoover, Los Angeles 44	Cal
Atomic Lab Sub. Cenco	3000 Claremont Ave, Berkeley 5	Cal
B & K Labs, Ltd.	4 Tilney St, Park La, London W1	Eng
Bendix Corp. Cincinnati Div.	3130 Wasson Rd, Cincinnati 8	Ohio
Bendix Edisons U.K. Ltd.	High Church St, New Basford, Nott.	Eng
Canadian Marconi Co.	2440 Trenton Ave. Montreal 16	Can
Dr. Virus KG	20 Brandenburg, Bonn	Ger
Dynac, Div. Hewlett-Packard Co.	395 Page Mill Rd. Palo Alto	Cal
EMI Electronics Ltd.	Hayes, Middlesex	Eng
EXCO ELECTRONICS LTD. AMERICAN TRADAIR CORP. Adv Pg 219	Southend-on-Sea, Essex	Eng
Electric Tachometer Corp.	88 & Dickens St. Phila 45	Pa
ELECTRONIC ASSOCIATES, LTD. Adv Pg 21	4616 Yonge St. Willowdale, Ont	Can
Erie Pacific Div. Rita Resistors	13900 S Weber Way, Hawthorne	Cal
FORRO SCIENTIFIC CO. Adv Pg 234	833 Lincoln St. Evanston	Ill
FOXBORO CO. Adv Pg 180	38 Neponset Ave. Foxboro	Mass
FRIESEKE & HOEPFNER GMBH, Adv Pg 113-H	Erlangen-Bruck	Ger
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 12	1 River Rd. Schenectady 5	NY
General Nuclear Corp	2202 S Cypress Ave, Fullerton	Cal
Gyra Electronics Corp	Box 184, LaGrange	Ill
HONDA INSTRUMENTS, INC. Adv Pg 207	Nakakirakichi Senju, Nakaku, Kyoto	Jap
INSTRUMENT & DEVELOPMENT PRODS CO., Adv Pg 254	203 W 19th Pl. Chicago	Ill
INTERTECHNIQUE S A, Adv Pg 112-R	81 rue Escudier, Boulogne/Billancourt, Seine	Fr
ISOTOPE DEVELOPMENTS LTD. Adv Pg 74	Gun Rd. Beeston, Reading, Berks	Eng
JOHNSON & ASSOCIATES, INC. WILLIAM R., Adv Pg 226	Box 478, Manasquan Lakes	NJ
LANDSVERK ELECTROMETER CO. Adv Pg 210	641 Sunset Ave. Glendale 1	Cal
L'Electronique Appliquee	18 rue de Dunoux Pizlay, Paris 16, Fr	
MINN-HONEYWELL REG CO. MEL PROD GROUP, Adv. Pgs. 138, 140	Wayne & Walnite Aves. Phila. 44	Pa
NERATOOM, N. V., Adv Pg 112-F	Mauritskade 38, The Hague	Neth
NUCLEAR CORP OF AMERICA, INST & CON DIV, Adv Pg 94	2 Hollywood Pl, Danville	NJ
Nuclear-Electronics Corp.	2025 N Broad St, Philadelphia 32	Pa
Nuclear Enterprises (GB) Ltd.	Lightbody, Edinburgh 11	Scot

NUCLEAR ENTERPRISES LTD.,		
Adv Pg 194	280 Bury St. Winnipeg 21	Man
NUCLEAR MEASUREMENTS CORP.,		
Adv Pg 227	2460 N Arlington Ave. Indnpls. 18	Ind
PACKARD INSTRUMENT CO. INC.		
Adv. Pgs. 84, 85	Box 428, La Grange	Ill
Picker X-Ray Corp.	25 S Broadway, White Plains	NY
Plessey Nucleonics Ltd.	Wendover Rd. Northampton, England	
Pontochin & Co. oHG	Box 1705, Frankfurt/Main 1	Ger
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	465 Hamlet Rd. Lynbrook	NY
RADIATION INSTRUMENT DEVELOPMENT LAB.		
Adv. Pgs. 216, 2264-D	61 E North Ave. Northlake	Ill
RADIATION TECHNOLOGY, INC.		
Adv. Pg. 3rd Cover	437 Antone St. NW, Atlanta 18	Ga
SELO	Via Tendone 27, Milan	Ital
Siemens & Halske AG	Rheinbrecknstr. 50, Karlsruhe, Germany	
Siemens-Reiniger-Werke AG	Luitpoldstr. 46, Erlangen	Ger
Telecomputing Corp.	8325 Aero Dr. San Diego 11	Cal
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 112-C	240 W 17th St. New York 11	NY
TRACERLAB, INC. Adv. Pgs. 134, 172-3	1601 Trapelo Rd. Waltham 54	Mass
Transducer Corp.	130 Woodland Ave. Westwood	NJ
Tron Electronics, Inc.	422 Smith St. Rochester 8	NY
Vendor-Rust, Inc.	70 Sargeant St. Hartford 2	Conn
VICTOREEN INSTRUMENT CO.		
Adv. Pg. 4th Cover	5800-11 Hough Ave. Cleveland 3	Ohio
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. SECT.		
Adv. Pgs. 70, 71	Pittsburgh	Pa

METERS--ELECTRIC
See AMMETERS
VOLTMETERS ETC.

METERS--FLOW, GAS
See Also CONTROLS--FLUID-FLOW

AEG, Adv Pg 113-A	Hactmann, Frankfurt/Main, Germany	
American Gas Furnace Co.	140 Spring St. Elizabeth	NJ
B-I-F Industries, Div. NY Air Brake Co.	530-D Harris Ave. Providence 1	RI
BAILEY METER CO. Adv Pg 69	29801 Euclid Ave. Wickliffe	Ohio
Bailey Meter Co. Ltd.	5010 St. Catherine St. W. Montreal, Que Can	
Barton Instrument Corp.	580 Monterey Pass Rd. Monterey Park	Cal
Black, Sivalls & Bryson, Inc.	7500 E 12 St. Kansas City 26	Mo
Bristol Co.	Box 1790 NBG, Waterbury 90	Conn
Brooks Instrument Co. Inc.	407 W Vine St. Hatfield	Pa
CHANDLER EVANS CORP. Adv Pg 120	Tinney Oil Blvd. West Hartford	Conn
Dynac, Div. Hewlett-Packard Co.	395 Page Mill Rd. Palo Alto	Cal
Dynatech Corp.	650 Massachusetts Ave. Cambridge 39	Mass
Eckardt AG, J. C.	Pragstr. 72/82, Stuttgart-Bad Cannstatt	Ger
Electrofio Meters Co. Ltd.	Abbey Rd. Park Royal, NW 10, London	Eng
Erie Pacific Div. Erie Resistor	12302 S Weber Way, Hawthorne	Cal
Evershed & Vignoles, Ltd. Acton Lane Wks.	Chiswick, London W4	Eng
Fischer & Porter Co.	60 Warminster Rd. Warminster	Pa
Flow Corp.	11 Carleton St. Cambridge 42	Mass
FOXBORO CO. Adv Pg 189	38 Neponset Ave. Foxboro	Mass
FRIESEKE & HOEPFNER GMBH,		
Adv Pg 113-H	Erlangen-Bruck	Ger
GELMAN INSTRUMENT CO. Adv Pg 233	Box 1154-H, Chelsea	Mich
General Controls Co.	801 Allen Ave. Glendale 1	Cal
GENERAL ELECTRIC CO. APPARATUS SALES		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
HAGAN CHEMICALS & CONTROLS, INC.		
Adv Pg 38	Box 1348, Pittsburgh 30	Pa
Hastings-Raydist, Inc.	Newcomb Ave, Hampton	Va
Hays Corp.	Hastings City 46	Ind
Honeywell Controls, Ltd.	Vanderhoof Ave. Toronto, Ont Canada	
Industrial Instrument Corp.	Drawer 777, Austin	Tex
JOHNSON & ASSOCIATES, INC. WILLIAM D.		
Adv Pg 226	Box 415, Mountain Lakes	NJ
Lifescope Div. Gen Precision, Inc.	Glendale 1	Cal
McGraw Equipment Corp. Walter, Chemwater Div.	17-19 Park Row, New York 38	NY
Moore-Nelles Div. of Worthington Corp.	Norwood	Mass
Mydrosa Co.	502 Paterson Plank Rd. E Rutherford	NJ
Muriam Instrument Co.	10800 Medina Ave, Cleveland 9	Ohio
NORS-HONEYWELL REG CO. NOL PRODS GROUP,		
Adv. Pgs. 138, 248	Wayne & Wodkin Aves. Phila. 44	Pa
National Instrument Labs. Inc.	868 Evans St. NE. Washington	DC
Negretti & Zambra (Canada) Ltd	4 Berchell Rd. Toronto 14	Ont
New York Air Brake Co	230 Park Ave. New York 17	NY
Porter Aeronautical Corp.	Route #22, Union	NJ
Republic Flow Meter Co.	2260 Diversey Pkwy. Chicago 47	Ill
Schaco Scientific Div. Schenker & Co.	75 Cliff St. New York 38	NY
Scientific Glass Apparatus Co. Inc.	108 Lakewood Tnr. Bloomfield	NJ
Solar Corp. of America	Dresher	Pa
Siemens & Halske AG	Rheinbrecknstr. 50, Karlsruhe, Germany	
Taylor Instrument Co.	95 Ames St. Rochester 1	NY
Wallace & Tiernan, Inc.	25 Main St. Belleville 9	NJ

METERS--FLOW, LIQUID
See Also CONTROLS--FLUID-FLOW

AEG, Adv Pg 113-A	Hactmann, Frankfurt/Main, Germany	
Armstrong Whitworth Equipment	Heacleaste, Gloucester	Eng
AVION, INC. Adv Pg 164	10-15 Northern Blvd. Westdale 77	NY
B-I-F Industries, Div. NY Air Brake Co.	530-D Harris Ave. Providence 1	RI
BAILEY METER CO. Adv Pg 69	29801 Euclid Ave. Wickliffe	Ohio
Bailey Meter Co. Ltd.	5010 St. Catherine St. W. Montreal, Que Can	
Barton Instrument Corp.	580 Monterey Pass Rd. Monterey Park	Cal
Bristol Co.	Box 1790 NBG, Waterbury 90	Conn
Brooks Instrument Co. Inc.	407 W Vine St. Hatfield	Pa
CHANDLER EVANS CORP. Adv Pg 120	Tinney Oil Blvd. West Hartford	Conn
Dynac, Div. Hewlett-Packard Co.	395 Page Mill Rd. Palo Alto	Cal
Dynatech Corp.	650 Massachusetts Ave. Cambridge 39	Mass
Eckardt AG, J. C.	Pragstr. 72/82, Stuttgart-Bad Cannstatt	Ger
Electrofio Meters Co. Ltd.	Abbey Rd. Park Royal, NW 10, London	Eng
Erie Pacific Div. Erie Resistor	12302 S Weber Way, Hawthorne	Cal
Evershed & Vignoles, Ltd. Acton Lane Wks.	Chiswick, London W4	Eng
Fischer & Porter Co.	60 Warminster Rd. Warminster	Pa
Flow Corp.	11 Carleton St. Cambridge 42	Mass
FOXBORO CO. Adv Pg 189	38 Neponset Ave. Foxboro	Mass
FRIESEKE & HOEPFNER GMBH,		
Adv Pg 113-H	Erlangen-Bruck	Ger
GELMAN INSTRUMENT CO. Adv Pg 233	Box 1154-H, Chelsea	Mich
General Controls Co.	801 Allen Ave. Glendale 1	Cal
GENERAL ELECTRIC CO. APPARATUS SALES		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
HAGAN CHEMICALS & CONTROLS, INC.		
Adv Pg 38	Box 1348, Pittsburgh 30	Pa
Hastings-Raydist, Inc.	Newcomb Ave, Hampton	Va
Hays Corp.	Hastings City 46	Ind
Honeywell Controls, Ltd.	Vanderhoof Ave. Toronto, Ont Canada	
Industrial Instrument Corp.	Drawer 777, Austin	Tex
JOHNSON & ASSOCIATES, INC. WILLIAM D.		
Adv Pg 226	Box 415, Mountain Lakes	NJ
Lifescope Div. Gen Precision, Inc.	Glendale 1	Cal
McGraw Equipment Corp. Walter, Chemwater Div.	17-19 Park Row, New York 38	NY
Moore-Nelles Div. of Worthington Corp.	Norwood	Mass
Mydrosa Co.	502 Paterson Plank Rd. E Rutherford	NJ
Muriam Instrument Co.	10800 Medina Ave, Cleveland 9	Ohio
NORS-HONEYWELL REG CO. NOL PRODS GROUP,		
Adv. Pgs. 138, 248	Wayne & Wodkin Aves. Phila. 44	Pa
National Instrument Labs. Inc.	868 Evans St. NE. Washington	DC
Negretti & Zambra (Canada) Ltd	4 Berchell Rd. Toronto 14	Ont
New York Air Brake Co	230 Park Ave. New York 17	NY
Porter Aeronautical Corp.	Route #22, Union	NJ
Republic Flow Meter Co.	2260 Diversey Pkwy. Chicago 47	Ill
Schaco Scientific Div. Schenker & Co.	75 Cliff St. New York 38	NY
Scientific Glass Apparatus Co. Inc.	108 Lakewood Tnr. Bloomfield	NJ
Solar Corp. of America	Dresher	Pa
Siemens & Halske AG	Rheinbrecknstr. 50, Karlsruhe, Germany	
Taylor Instrument Co.	95 Ames St. Rochester 1	NY
Wallace & Tiernan, Inc.	25 Main St. Belleville 9	NJ

Bailey Meter Co. Ltd.	5010 St. Catherine St. W. Montreal, Que Can	
Barton Instrument Corp.	580 Monterey Pass Rd. Monterey Park	Cal
Bristol Co.	Box 1790 NBG, Waterbury 90	Conn
Brooks Instrument Co. Inc.	407 W Vine St. Hatfield	Pa
CHANDLER EVANS CORP. Adv Pg 120	Tinney Oil Blvd. West Hartford	Conn
Dynac, Div. Hewlett-Packard Co.	395 Page Mill Rd. Palo Alto	Cal
Dynatech Corp.	650 Massachusetts Ave. Cambridge 39	Mass
Eckardt AG, J. C.	Pragstr. 72/82, Stuttgart-Bad Cannstatt	Ger
Electrofio Meters Co. Ltd.	Abbey Rd. Park Royal, NW 10, London	Eng
Erie Pacific Div. Erie Resistor	12302 S Weber Way, Hawthorne	Cal
Evershed & Vignoles, Ltd. Acton Lane Wks.	Chiswick, London W4	Eng
Fischer & Porter Co.	60 Warminster Rd. Warminster	Pa
FOXBORO CO. Adv Pg 189	38 Neponset Ave. Foxboro	Mass
GELMAN INSTRUMENT CO. Adv Pg 233	Box 1154-H, Chelsea	Mich
General Controls Co.	801 Allen Ave. Glendale 1	Cal
GENERAL ELECTRIC CO. APPARATUS SALES		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
HAGAN CHEMICALS & CONTROLS, INC.		
Adv Pg 38	Box 1348, Pittsburgh 30	Pa
Honeywell Controls, Ltd.	Vanderhoof Ave. Toronto, Ont Canada	
HONEYWELL INSTRUMENTS, INC.		
Adv Pg 207	Nakashimatsu Senju, Nakaku, Kyoto	Jap
INSTRUMENTATION ASSOCIATES, INC.,		
Adv Pg 226	17 W 46th St. New York 36	NY
Kahl Scientific Instrument Corp.	Box 1108, El Cajon	Cal
Lewis & Norlberg Co.	6936 Stenton Ave. Phila 44	Pa
Negretti & Zambra (Canada) Ltd	4 Berchell Rd. Toronto 14	Ont
Nuclear Thermometer Co. Inc.	124 Livingston St. Brooklyn 1	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 187	Eindhoven	Neth
Pye & Co. Ltd., W. G.	Tech St. Cambridge, England	
Roy Co., Milton	1200 E Mermond Ln. Phila 18	Pa
Siemens & Halske AG	Rheinbrecknstr. 50, Karlsruhe, Germany	
Thompson, Ltd., John	Wolverhampton	Eng
WELCH SCIENTIFIC CO. Adv Pg 192	1515 Sedgwick St. Chicago 10	Ill

METERS--RADIATION-SURVEY
See MONITORS--RADIATION

METERS--REACTOR-PERIOD

AEG, Adv Pg 113-A	Hactmann, Frankfurt/Main, Germany	
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,		
Adv Pg 113-D	Charleroi	Belg
Beckman Corp. Cincinnati Div.	2500 Wasson Rd. Cincinnati 8	Ohio
BECO ELECTRONICS LTD. AMERICAN TRADAIR CORP.		
Adv Pg 219	Southend-on-Sea, Essex	Eng
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Nuclear Corp	1205 S Cypress Ave. Fullerton	Cal
Miles Hivolt Ltd	The Horseshoe Rd. Dunstable-in-Bed, Sunnyt	Eng
NORS-HONEYWELL REG CO. NOL PRODS GROUP,		
Adv. Pgs. 138, 248	Wayne & Wodkin Aves. Phila. 44	Pa
NERATOMS, N. V., Adv Pg 113-P	Hoofdstraat 30, The Hague	Neth
Pembler & Co. Ltd., Beam, Electronics Div.	2 Pilum, Edinburgh 8	Scot
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 187	Eindhoven	Neth
Plessey Nucleonics Ltd.	Wendover Rd. Northampton, England	
Reichert-Elektronik GmbH	Trier-Mosel-Petersberg	W Ger
Siemens & Halske AG	Rheinbrecknstr. 50, Karlsruhe	Ger
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 112-C	240 W 17th St. New York 11	NY
VICTOREEN INSTRUMENT CO.,		
Adv. Pg. 4th Cover	5800-11 Hough Ave. Cleveland 3	Ohio
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. SECT.		
Adv. Pgs. 70, 71	Pittsburgh	Pa

METERS--RECORDING
See RECORDERS

MICA

Asheville-Schoonmaker Mica Co.	900 Jefferson Ave. Newport News	Va
Baldwin Industrial Controls	Dartford, Kent	Eng
Beryl Ores Co.	Box 186, Rt. 1, Arvada	Colo
Bram Metallurgical-Chemical Co.	800 Hale Ave. Philadelphia 38	Pa
Brush Beryllium Co.	3630 Euclid Ave. Cleveland 3	Ohio
Continental-Diamond Fibre Corp.	Newark	Del

MICROAMMETERS
See AMMETERS--MILLI & MICRO

MICROCHEMICAL EQUIPMENT

CENTRAL SCIENTIFIC CO. Adv Pg 112	1700 Irving Park Rd. Chicago 13	Ill
Corning Glass Works, Shielding Radiation	Corning	NY
Flica Instruments Inc.	430 Buckley St. Bristol	Pa
Gallenkamp & Co. Ltd., A.	San St. London, E. C. 2, England	
GELMAN INSTRUMENT CO. Adv Pg 233	Box 1154-H, Chelsea	Mich
Hacker & Co. Inc., William J.	Box 646, West Caldwell	NJ
Kahl Scientific Instrument Corp.	Box 1108, El Cajon	Cal
Ohio Nuclear Inc.	17105 Knickerbocker Rd. Cleve 40	Ohio
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	465 Hamlet Rd. Lynbrook	NY
Thomas Co., Arthur H.	Vine St at 3rd, Philadelphia 5	Pa
WELCH SCIENTIFIC CO. Adv Pg 192	1515 Sedgwick St. Chicago 10	Ill

MICROFILMING
See SERV. & CONS'LT: MICROFILMING

MICROSCOPES--ELECTRON

A. E. I. Ltd.	33 Grosvenor Pl. London SW1	Eng
Beckman Corp. Cincinnati Div.	2500 Wasson Rd. Cincinn 8	Ohio
Hitachi, Ltd.	1-6 Marunouchi, Chiyoda-ku, Tokyo	Jap
Mihma, Inc.	7820 S W Macadam Ave, Portland 19	Ore
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 187	Eindhoven	Neth
Picker X-Ray Corporation	1275 Mamaroneck Ave. White Plains	NY
Siemens & Halske AG	Rheinbrecknstr. 50, Karlsruhe, Germany	

MICROSCOPES--OPTICAL

American Optical Co. Instrument Div.	Eggert & Sager Sts. Buffalo 15	NY
American Optical Co. Safety Prod. Div.	87 Southbridge St. Southbridge	Mass
Bertier, Benard & Turenne, Anc. Ets.	88 rue Cartel, Paris 18e	Fr
Bausch & Lomb, Inc.	85002 Bausch St. Rochester 2	NY
Broadhurst Clarkson & Co. Ltd.	63 Farringdon Rd. London EC1	England
Bahl Optical Co.	1869 Beech Ave. Pittsburgh 33	Pa
CENTRAL SCIENTIFIC CO. Adv Pg 112	1700 Irving Park Rd. Chicago 13	Ill
Do All Co.	254 N Laurel Ave. Des Plaines	Ill
Eagle Equipment Co.	435 S Dearborn St. Chicago	Ill
Epic, Inc.	160 Nassau St. New York 38	NY
Ernest Cobb, Scientific Instrument Div.	16 W 46th St. New York 36	NY
Gaertner Scientific Corp.	1227 Wrightwood Ave. Chicago	Ill
Hacker & Co. Inc., William J.	Box 646, W Caldwell	NJ
Hamburg Thermometer Co. Inc.	124 Livingston St. Brooklyn 1	NY
Pacific Transducer Corp.	11828 SW Pico Blvd. LA 64	Cal
Pye & Co. Ltd., W. G.	Tech St. Cambridge	Eng
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Ed G. Clemenceau, Courbevoie, Seine	Fr
Schaco Scientific Div. Schenker & Co.	75 Cliff St. New York 38	NY
Union Industrial Equipment Corp	Port Chester	NY
Unitron Instrument Co.	66 Needham St. Newton Highlands, 61	Mass
Wallin Optical Systems Inc.	18603 Ventura Blvd. Tarzana	Cal
WELCH SCIENTIFIC CO. Adv Pg 192	1515 Sedgwick St. Chicago 10	Ill

MICROTOMES

American Optical Co. Instrument Div.	Eggert & Sager Sts. Buffalo 15	NY
Cambridge Instrument Co. Inc.	430 Lexington Ave. New York 17	NY
Cambridge Instrument Co. Ltd.	13 Grosvenor Pl. London SW1, Eng	

CENTRAL SCIENTIFIC CO. Adv Pg 112	1700 Irving Park Rd. Chicago 13	Ill
Cenco Scientific Instruments Inc.	341 Devon St. Kearny	NJ
Hacker & Co. Inc., William J.	Box 646, W Caldwell	NJ
INSTRUMENTATION ASSOCIATES, INC.		
Adv Pg 236	17 W 60th St. New York 23	NY
International Equipment Co.	1304 Soldiers Field Rd. Boston 35	Mass
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 187	Eindhoven	Neth
Precon & Instruments Corp.	15 Stone Ave, Brooklyn 30	NY
Scheco Scientific Div. Schenkin & Co.	70 Cliff St. New York 38	NY
WELCH SCIENTIFIC CO. Adv Pg 192	1515 Sedgwick St. Chicago 10	Ill

MICROWAVE COMPONENTS & TEST EQUIPMENT

A.E.I. Ltd.	33 Grosvenor Pl, London SW1, Eng	
Bendix Corp. Red Bank Div. Electron Tube Prods.	Eatontown	NJ
California Tech. Ind. Div. Textron Inc.	1461 Old County Rd. Belmont	Cal
Canadian Marconi Co.	2442 Trenton Ave. Montreal 16	Can
Cutler-Hammer, Inc.	632 N 12th St, Milwaukee 1	Wis
Designers for Industry, Inc.	4941 Pulaski Pkwy, Cleveland 9	Ohio
Dymec, Div. Hewlett-Packard Co.	395 Page Mill Rd. Palo Alto	Cal
Engelhard Industries, Inc.	113 Astor St. Newark 5	NJ
Engis Equipment Co	431 S Dearborn St, Chicago	Ill
General Dynamics/Astronautics	Box 1128, San Diego 12	Cal
General Radio Co.	West Concord	Mass
Hewlett-Packard Co.	1501 Page Mill Rd, Palo Alto	Cal
Hilger & Watts, Ltd.	98 St. Pancras Way, London NW 1, Eng	
Huggins Laboratories, Inc.	999 E Arques Ave. Sunnyvale	Cal
Hycon Mfg. Co.	700 Royal Oaks Dr. Monrovia	Cal
KAMAN NUCLEAR, Adv. Pgs. 190, 191	Garden of the Gods Rd. Colo Springs	Colo
Kay Electric Co.	Maple Ave. Pine Brook	NJ
KEARFOTT DIV. GEN. PRECISION, INC.		
Adv Pg 231	1150 McBride Ave. Little Falls	NJ
Litton Industries	336 N Foothill Rd, Beverly Hills	Cal
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
Mauser Laboratories, Inc.	215 Fairfield Ave, Stamford	Conn
Marconi's Wireless Telegraph Co. Ltd.	Chelmsford, Essex	Eng
MICROWAVE Associates, Inc.	South Ave, Burlington	Mass
Philco Corp., Gen. & Ind. Co.	4700 Wissahickon Ave, Phila 44	Pa
PHILCO CORP. LANSDALE TUBE DIV.		
Adv Pg 193	Church Rd. Lansdale	Pa
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 187	Eindhoven	Neth
Polemal Electronics Corp.	45-20 34th St, Long Island City 1	NY
Ramage & Miller Inc.	130 S 2nd St. Richmond	Cal
Raytheon Co. Microwave & Power Tube Div. Spencer Laboratory	Burlington	Mass
Solartron Electronic Group Ltd.	Victoria Rd. Farnborough, Hants	Eng
Specialty Electronics Devel. Corp.	151-01 19th Ave, Flushing	NY
Sperry Microwave Electronics Co.	Box 1828, Clearwater	Fla
Spurgin Blanco-plge Gesellschaft	Ungererstr. 25, Munich 2, W Ger	
Standard Tel. & Cables Ltd.	89 Glasshouse St, London EC 1	Eng
Sylvania Elec Prods Inc., Electronic Tubes Div.	Emporium	Pa
Sylvania Electronic Systems	40 Sylvan Rd. Waltham 54	Mass
Telecomputing Corp.	8355 Aero Dr, San Diego 11	Cal
Telectro Industries Corp.	35-16 37th St, LIC 1	NY
Telinstrument, Inc.	1346 Connecticut Ave, NW, Wash 6	DC
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 112-C	240 W 17th St. New York 11	NY
Thompson Ramo Wooldridge Inc.	8433 Fallbrook Ave. Canoga Park	Cal
Trak Electronics Co. Inc.	Wilton	Conn
Victory Engineering Corp.	Springfield Ave. Springfield	NJ
Wayne Kerr Corp.	1835 Race St. Philadelphia 3	Pa

MILLS—GRINDING

Abbe Engineering Co.	420 Lexington Ave, New York 17	NY
Babcock & Wilcox Ltd.	209 Euston Rd, London NW 1, England	
Beach-Russ Co.	420 Lexington Ave, New York 17	NY
Bethlehem Steel Corp.	701 E 3rd St. Bethlehem	Pa
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
Consolidated Wrought Steel Div. U. S. Steel Corp.	Box 2953, Tuna, Ann, U A 34	Cal
Denver Fire Clay Co.	Box 5516, Denver 17	Colo
General American Transportation Corp.	135 S LaSalle St, Chicago 3	Ill
Hanns S.A. Ateliers, J.	Montzen-sur-Lesse	Belg
Hummel Co, O.	Box 478, Pittsburgh 30	Pa
Johnson Corp, J	805 Wood St, Three Rivers	Mich
Mansfield & Co. Ltd., Frank	60 Hamilton Sq, Birkenhead, Ches. Eng	
Metal Disintegrating Co. Div. American-Marietta Co.	Box 296, Elizabeth 9	NJ
Miller & Son, Inc., Franklin T.	36 Meadow St. E Orange 36	NJ
Paterson Foundry & Machine Co.	East Liverpool	Ohio
Pulverizing Machinery Co. Div. American-Marietta Co.	Chatham Rd. Summit	NJ
Scheco Scientific Div. Schenkin & Co.	70 Cliff St. New York 38	NY
Societe Pieux-Pulsant	360 rue Saint-Honore, Paris 1, France	
Southwestern Engineering Co.	4800 Santa Fe Ave, Los Angeles 58	Cal
Thompson, Ltd., John	Wolverhampton, England	
Tosi, S.p.A., Franco	Legnano, Milan	Ital

MILLS—ROLLING

Abbe Engineering Co.	420 Lexington Ave, New York 17	NY
Alloys Unlimited, Inc.	53-01 43rd Ave, LIC 1	NY
Baldwin-Lima-Hamilton Corp.	Dept W K, Philadelphia 42	Pa
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
Denver Fire Clay Co.	Box 5516, Denver 17	Colo
Penn Mfg. Co.	200 Penn Rd. Hewington	Conn
Miller & Son, Inc., Franklin T.	36 Meadow St. E Orange 36	NJ
Robertson & Co. Ltd., W. H. A.	Lyons Wk, Bedford	Eng
SYLCOR DIV. SYLVANIA ELEC PRODS. INC.		
Adv Pg 28	Carrington Rock Rd. Stoneville	NY
Tosi, S.p.A., Franco	Legnano, Milan	Ital
Waterbury Farrel Foundry & Machine Co. Div. of Textron, Inc.	55 W Johnson Ave. Cheshire	Conn

MODELS—SCALE

Atkins & Merrill, Inc.	Post Rd. South Sudbury	Mass
Bethlehem Steel Corp.	701 E 3rd St. Bethlehem	Pa
Dendy & Assoc., Richard	4-6 Seaton Pl. Hampstead Rd. London NW1	Eng
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
Maxwell Co., Inc.	301 Congress St, Boston 10	Mass
Model Display Studios	Box 10004, Raleigh	NC

MODERATORS—REACTOR, ORGANIC, POLYPHENYL
See Also GRAPHITE
METALS, ALLOYS & COMPOUNDS
WATER—HEAVY

Monsanto Chemicals Ltd.	10/18 Victoria St, London SW1, Eng	
National Beryllia Corp.	1st & Hudsell Ave, Haskell	NJ

MONITORS—MOISTURE
See Also GAGES—HUMIDITY

American Instrument Co, Inc.	8030 Georgia Ave, Silver Spring	Md
Atkins Technical, Inc.	1270 W 3rd St, Cleveland 13	Ohio
Aminform Corp.	848 Main St, Waltham	Mass
Baldwin Industrial Controls	Dartford, Kent	Eng
Consolidated Electrodynamics Corp.	360 Sierra Madre Villa, Pasadena	Cal
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
Kahl Scientific Instrument Corp.	Box 1188, El Cajon	Cal
Meteorology Research, Inc.	3469 N Lake Ave. Altadena	Cal
National Spectrographic Lab, Inc	6300 Euclid Ave, Cleve 3	Ohio
Nuclear Enterprises (GB) Ltd.	Eightshill, Edinburgh 11	Scot
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),		
Adv. Pgs. 217, 219, 221	1860 Warren St. Apollo	Pa

MONITORS—RADIATION
See Also COUNTERS—RADIATION
REACTOR MONITORING SYSTEMS
SERV. & CONS'LT: MONITORING
1. AIR-PARTICLE, RADIOACTIVITY
2. AREA-RADIATION, FIXED
3. AREA-RADIATION, HAND-PORTABLE
4. CLOTHING & LAUNDRY, RADIOACTIVITY
5. GAS, RADIOACTIVITY
6. HAND & FOOT, RADIOACTIVITY
7. SCRAM, REACTOR
8. SITE, MOBILE
9. WATER, RADIOACTIVITY

AEG, 1-3-7, Adv Pg 113-A	Hanbleben, Frankfurt/Main, Germany	
A. E. I. Ltd. Instrumentation Div. 1	Crown House, Aldwych, London WC2	Eng
Aerojet-General Nucleonics, 1-4-5-6-7-8-9	Box 77, San Ramon	Cal
Atomec, Ltd. 9-3	High Wycombe, Buckinghamshire	Eng
Allied Research Associates, Inc. 2	43 Leon St, Boston 15	Mass
AMERICAN NUCLEAR CORP. 1-2-3-4-5-6-7-8-9,		
Adv Pg 198	Box 428, Oak Ridge	Tenn
American Trailer Corp. Ind. EKCO Electronics, Ltd. 9-3-1	36-01 38th St, Long Island City 6	NY
Applied Physics Corp. 5	3734 S Peck Rd. Monrovia	Cal
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, 1-2-3-4-5-7-8-9,		
Adv Pg 112-D	Charleroi	Belg
Atomaterial Corp. 1-4-5-6-8	111 W Jewel Ave, St. Louis 19	Mo
ATOMIC ACCESSORIES, INC. 1-2-3-4,		
Adv Pg 200	811 W Merrick Rd. Valley Stream	NY
Atomium Corp. 9-8	949 Main St. Waltham	Mass
B & K Labs. Ltd. 1-9	4 Tilney St, Park Ln. London W1	Eng
Bell Telephone Mfg. Co., 2-4-6	20 Berkenrode, Hoboken/Antwerp	Belg
Bendix Corp. Cincinnati Div. 1-9	3130 Wagner Rd. Cincinnati 6	Ohio
Bendix Friesen U.K. Ltd. 2-7	High Church St, New Basford, Nott.	Eng
Berwick Associates, Inc. 3	128 E 42nd St, New York 22	NY
Bundept Ltd. 9-4	West St, Sittb, Kent, Eng	
CONTROLS FOR RADIATION, INC. 1		
Adv Pg 189	130 Alewife Brook Pkwy. Cambridge 40	Mass
Curtiss-Wright Corp. Princeton Div. 2	Box 110, Princeton	NJ
D. I. S. I. Nuclear Corp. 1-2-3-4-5-6-7-8-9	Via A. Boccioni 20, Milan	Ital
DEFENSE APPARES., 4-6, Adv Pg 229	115 Alfye St. Hartford 3	Conn
EMI Electronics Ltd. 2-6	Hayes, Middlesex	Eng
EMI/US, 2-4-6, Adv Pg 49	1720 N Vine St. Hollywood 28	Cal
EQUILINE INSTRUMENT CORP. 1-2-3-4-6		
Adv Pg 195	Box 379, Santa Fe	Mex
EDGERTON, GERMESHAUSEN & GRIER, INC. 1-2-3-5-6-8,		
Adv Pg 189	160 Brookline Ave. Boston 15	Mass
EKCO ELECTRONICS LTD. AMERICAN TRADAIR CORP. 1-3,		
Adv Pg 230	Southend-on-Sea, Essex	Eng
ELECTRONIC ASSOCIATES, LTD. 1-3-4-6,		
Adv Pg 21	4810 Yonge St. Willowdale, Ont	Can
Equipment Associes Brasileiro Ltda. 2-5	Box 2054, Rio de Janeiro	Braz
Erie Resistor Corp. 5	644 W 12th St. Erie	Pa
Fischbein, Mann & Co. 2-3-4-5	100 Electra Ln. Yonkers	NY
FORRO SCIENTIFIC CO. 1, Adv Pg 234	830 Lincoln St. Evanston	Ill
FRANKLIN SYSTEMS, INC. 2-3-5-6-8,		
Adv Pg 230	3734 Wilshire Rd. W Palm Beach	Fla
FRAZAR & HANSEN LTD. 1-2,		
Adv Pg 112-E	301 Clay St. San Francisco	Cal
FRIESEKE & HOEPFNER GMBH, 1-2-3-5-6-8,		
Adv Pg 112-H	Erlangen-Bruck	Ger
GELMAN INSTRUMENT CO. 1-2,		
Adv Pg 223	Box 1118-H, Chelsea	Mich
General Dynamics/Electronics, 2-7	100 Carlton Rd. Rochester 3	NY
General Dynamics/Fort Worth, 1-8	Box 748 Fort Worth 1	Tex
GENERAL ELECTRIC CO. APPARATUS SALES, 2-3-7-8-9,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
GENERAL MEASUREMENTS, 5-8,		
Adv Pg 22	33 Railroad Ave, Gainesville	NY
General Nuclear Corp. 1-6-4-5-6-7-8-9	2580 S Cypress Ave, Fullerton	Cal
Hitachi, Ltd, 1-9	1-4-chome Marunouchi, Chiyoda-ku, Tokyo	Jap
ISOTOPE DEVELOPMENTS LTD. 2,		
Adv Pg 74	Bath Rd. Beenham, Reading, Berks	Eng
ISOTOPES INC. 2, Adv Pg 193	123 Woodland Ave. Westwood	NJ
Ital Elettronica S.p.A. 5	Via Ignazio Pettinengo 75, Roma	Ital
JOHNSON & ASSOCIATES INC., WILLIAM S. 1-2-3-4-5-8-9,		
Adv Pg 236	Box 473, Montvale Lakes	NJ
JOHNSTON LABS. INC., WILLIAM H., 1-9,		
Adv Pg 198	3617 Woodland Ave. Baltimore 15	Md
Kahl Scientific Instrument Corp. 1-5-3-4-5-8-9	Box 1188, El Cajon	Cal
Kobe Kogyo Corp. 1-3-5-5-8-9,	1-5 Wakayama-Dori, Hyogo-ku, Kobe	Jap
Lab. Prof. Dr. R. Berthold, 1-4-5-6	75 Calmbacherstr. Wildbad im Schwarzwald	Ger
LAND-AIR INC. SUB. DYNALECTRON INC. 1-3-5,		
Adv Pg 184	7444 W Wilson Ave. Chicago 31	Ill
LANDSVERK ELECTROMETER CO. 1-3-9,		
Adv Pg 219	641 Tuscan Ave. Glendale 1	Cal
Leeds & Northrup Co. 1	4901 Stenton Ave, Phila 44	Pa
L'Electronique Appliquee, 1-6	25 rue de Docteur Finlay, Paris 15	Fr
LIBBEL ELECTRONIC LABS. 1-2-3-6-8,		
Adv Pg 218	1226 Flushing Ave. Brooklyn 37	NY
Lockheed Aircraft Corp., 1-9	Box 551, Burbank	Cal
Lockheed Aircraft Corp. Georgia Div. 1-2	1600 Northside Dr. NW, Atlanta 18	Ga
M. B. L. E. 1-3-5-5-6-9	80 Rue des Deux Gares, Brussels 7	Belg
MELLON, INC., GEORGE T. 2-3-5,		
Adv Pg 182	152 Nassau St. New York 38	NY
Millipore Filter Corp. 9	Bedford	Mass
Monitor Systems Inc. 7	Dept. 7, Ft. Wash, Ind, Pk. Ft. Wash.	Pa
National Spectrographic Lab, Inc, 1	6300 Euclid Ave, Cleve 3	Ohio
NERATON, N. V., 1-2-3-4-5-8,		
Adv Pg 112-F	Hazelaleide 20, The Hague	Neth
Neutronics Laboratory, 2	Tinley Park	Ill
NUCLEAR-CHICAGO CORP. 2-3,		
Adv. Pgs. 34-37	345 E Howard Ave. Des Plaines	Ill
NUCLEAR CORP OF AMERICA, INST & CONT DIV, 2-3,		
Adv Pg 94	2 Ridgewood Pl, Danville	NJ
Nuclear-Electronics Corp. 1-2-6	2925 N Broad St, Philadelphia 32	Pa
Nuclear Enterprises (GB) Ltd. 1-9-3	Eightshill, Edinburgh 11	Scot
NUCLEAR ENTERPRISES LTD. 1-2-3,		
Adv Pg 194	330 Bury St. Wanstead 21	Eng
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), 2-3,		
Adv. Pgs. 217, 219, 221	1860 Warren St. Apollo	Pa
NUCLEAR MEASUREMENTS CORP. 1-2-3-5-6,		
Adv Pg 237	3440 N Arlington Ave. Indpls. 18	Ind
Nuclear Research Applications Ltd. 2-3-4-5-8-9	Bell St. Balgore, Surrey, England	
NUCLEONIC CORP. OF AMERICA, 1-2-3-4-6-8,		
Adv Pg 202	196 Dupont St. Brooklyn 21	NY
Olmont Corp. 5	2236 Dugan St, Cincinnati 22	Ohio
Pozzi Equipment, Ltd. 2-3-4	Helmsdorpe Ind Estate, Redhill, Surrey	Eng
Pneumon Ltd. 2-3	54 Princes St, Hanover Sq, London W1	Eng
Philips Electronic Instruments, 2-3-4-5	750 S Fulton Ave, Mt. Vernon	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. 1-2-3-4-6-8,		
Adv Pg 187	Eindhoven	Neth
Picker X-Ray Corporation, 2-3	1270 Mamaroneck Ave. White Plains	NY
Plessey Nucleonics Ltd. 2-3-4-5-9	Wooden Rd. Northampton	Eng
Pneumatics & Co. (GB), 1-2-3-4-5-6-7-9	Box 2788, Pembleton/Main 1	Ger
RADIATION COUNTER LABS. INC. 1-2-3-4-6-8,		
Adv. Pgs. 82, 83	5122 W Grove St. Skokie	Ill
RADIATION EQUIP. & ACCESSORIES CORP. 1-2-3-4,		
Adv. Pg. 3rd Cover	665 Rawlak Rd. Lyndonvh	NY
RADIATION INSTRUMENT DEVELOPMENT LAB. 2,		
Adv. Pgs. 216, 238-D	61 E Hush Ave. Northlake	Ill
RADIATION TECHNOLOGY, INC. 2-3-5,		
Adv. Pg. 3rd Cover	457 Antone St. NW, Atlanta 18	Ga
Riggs Nucleonics Corp. 2-9	155 W Magnolia Blvd, Burbank	Cal
Rochester Instrument Systems Inc. 1-2-7	575 N Union St, Rochester 5	NY
Schmidt Instrument Co. 2	Box 111, San Carlos	Cal
SELO, 1-3-6	Via Teodosio 57, Milan	Ital
SOLID STATE RADIATIONS, INC. 2-4		
Adv Pg 211	2261 S Carmelina Ave. LA 64	Cal
Special Instruments Laboratory, Inc, 1-2-3-8	332 W Vine Ave, Knoxville 18	Tenn
Specialty Electronics Devel. Corp. 2	151-01 19th Ave, Flushing	NY
Swanson & Mills, Inc. 1-2-3	611 Lower St, Dallas 7	Tex
TECHNICAL ASSOCIATES, 1-2-3-4-6,		
Adv Pg 239	140 W Providencia Ave. Burbank	Cal
Technical Operations, 9	South Ave, Burlington	Mass

Telechrome Mfg. Corp. 1-2-3-8 ..... 186 Direx Ave, Amityville ..... NY
TERMINAL RADIO INTERNATIONAL LTD. 1-3-3-8-9,
Adv Pg 113-C ..... 348 W 17th St. New York 11 ..... NY
TRACERLAB, INC. 1-3-3-5-8-9,
Adv. Pgs. 124, 113-5 ..... 1601 Trapelo Rd. Waltham 54 ..... Mass
U. S. NUCLEAR CORP. 1-2-3-4-5-6-8-9,
Adv Pg 127 ..... 801 N Lake St. Box 2822, Burbank ..... Cal
Universal Transistor Products Corp. 2-3-4 ..... 380 Oak St. Copiague ..... NY
Uranium Instruments Co. 3 ..... Box 1181, Grand Junction ..... Colo
WESTGREEN INSTRUMENT CO. 1-2-3-5-7-8-9.
Adv. Pg. 4th Cover ..... 2880-11 Waugh Ave. Cleveland 3 ..... Ohio
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. SECT. 1-2-5-7-9,
Adv. Pgs. 70, 71 ..... Pittsburgh ..... Pa

MOTOR-GENERATOR SETS

AEG, Adv Pg 113-A ..... Nuetheuer, Frankfurt/Main, Germany
A.E.I. Ltd. ..... 33 Grosvenor Pl. London SW1, Eng
ALLIS-CHALMERS MFG. CO.,
Adv. Pgs. 109-111 ..... 935 S 70th St. Milwaukee ..... Wis
Alsthom, Nuclear Div. ..... 38, Ave. Kleber, Paris 16, France
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,
Adv Pg 112-D ..... Charleroi ..... Belg
AVIEN, INC. Adv Pg 104 ..... 38-15 Northern Blvd. Woodside 77 ..... NY
British Electrical Repairs Ltd. ..... 10 Charlotte St. Manchester 1 ..... Eng
Chemillus Engrg. Wks. Ltd. ..... 109 Rte de Lyon, Geneva ..... Switz
Consolidated Diesel Electric Corp. ..... 880 Canal St. Stamford ..... Conn
Electric Indicator Co. Inc. ..... Camp Ave. Stamford ..... Conn
Electric Machinery Mfg. Co. ..... 800 Central Ave. Minneapolis 13 ..... Minn
Elecrun Dynamics Div.
Gen. Dynamics Corp. ..... 168 Ave. A & North St. Bayonne ..... NJ
Fuji Electric Mfg. Co. Ltd. ..... 2-6 Marunouchi, Chiyoda-ku, Tokyo ..... Jap
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ..... 1 River Rd. Schenectady 5 ..... NY
General Electric Co. Ltd. of England ..... Erith, Kent, England
Hitachi, Ltd ..... 1-4-chome Marunouchi, Chiyoda-ku, Tokyo ..... Jap
Leach Corp. ..... 18435 Susana Rd. Compton ..... Cal
HERATRON, N. V., Adv Pg 113-F ..... Waarlandsle 38, The Hague ..... Neth
Oerlikon Engineering Co. ..... Zurich 50, Switzerland
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 107 ..... Eindhoven ..... Neth
Reliance Electric & Engineering Co. ..... 24701 Euclid Ave. Cleveland 17 ..... Ohio
Sangamo Electric Co. ..... 11 & Converse Sts. Springfield Ill
Vara Inc. ..... 5201 Walnut St. Garland ..... Tex

MOTORS—A-C

AEG, Adv Pg 113-A ..... Nuetheuer, Frankfurt/Main, Germany
A.E.I. Ltd. ..... 33 Grosvenor Pl. London SW1, Eng
Air Marine Motors, Inc. ..... 389 Bay View Ave. Amityville ..... NY
Alloheme Accessories Corp. ..... 1434 Chestnut Ave. Hillside 5 ..... NJ
Allis Co., Louis ..... 427 E Stewart St. Milwaukee 7 ..... Wis
ALLIS-CHALMERS MFG. CO.,
Adv. Pgs. 109-111 ..... 935 S 70th St. Milwaukee 1 ..... Wis
Alsthom, Nuclear Div. ..... 38, Ave. Kleber, Paris 16, France
American Bosch Arma Corp. ..... 320 Fulton Ave. Hempstead ..... NY
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,
Adv Pg 112-D ..... Charleroi ..... Belg
AVIEN, INC. Adv Pg 104 ..... 38-15 Northern Blvd. Woodside 77 ..... NY
Bendix Corp. Eclipse Pioneer Div. ..... Teterboro ..... NJ
British Electrical Repairs Ltd. ..... 10 Charlotte St. Manchester 1 ..... Eng
Canadian Westinghouse Co. Ltd. ..... Box 510, Hamilton, Ontario, Canada
Eastern Air Devices, Inc. Div. Norbute Corp.
385 Central Ave. Dover ..... NH
Electric Indicator Co. Inc. ..... Camp Ave. Stamford ..... Conn
Electric Machinery Mfg. Co. ..... 800 Central Ave. Minneapolis 13 ..... Minn
Elecrun Dynamics Div.
Gen. Dynamics Corp. ..... 168 Ave. A & North St. Bayonne ..... NJ
Fisco Industries, Inc. ..... 256 N Union St. Rochester 5 ..... NY
Fuji Electric Mfg. Co. Ltd. ..... 2-6 Marunouchi, Chiyoda-ku, Tokyo ..... Jap
Garrett Corp. ..... 9851 Sepulveda Blvd. Los Angeles 45 ..... Cal
General Controls Co. ..... 801 Allen Ave. Glendale 1 ..... Cal
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ..... 1 River Rd. Schenectady 5 ..... NY
General Electric Co. Ltd. of England ..... Erith, Kent, England
Hayden Co., A. W. ..... 286 N Elm St. Waterbury ..... Conn
Hitachi, Ltd. ..... 1-4 Marunouchi, Chiyoda-ku, Tokyo ..... Jap
Hodge Controls Div. Ortron Corp. ..... 105 River Rd. Cos Cob ..... Conn
Hoover Electric Co ..... Port Columbus Arpt, Columbus 19 ..... Ohio
Hydro Aire Co. Div. Crane Co. ..... 2000 Winona Ave. Burbank ..... Cal
KEARFOTT DIV. GEN. PRECISION, INC.
Adv Pg 221 ..... 1150 McBride Ave. Little Falls ..... NJ
Oerlikon Engineering Co. ..... Zurich 50, Switzerland
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 107 ..... Eindhoven ..... Neth
Redmond Co. Inc. ..... 201 Monroe St. Owosso ..... Mich
Reliance Electric & Engineering Co. ..... 24701 Euclid Ave. Cleveland 17 ..... Ohio
Robbins & Myers, Inc. ..... 1345 Lagonda Ave. Springfield ..... Ohio
Sangamo Electric Co. ..... 11 & Converse Sts. Springfield Ill
Servomechanisms, Inc. ..... 200 N Aviation Blvd. El Segundo ..... Cal
Smith Corp., A. O., Atomic & Process Equip. Div. ..... 2080 N 27 St. Milwaukee 1 ..... Wis
Superior Electric Co., The ..... 383 Middle St. Bristol ..... Conn
Technology Instrument Corp ..... 531 Main St. Acton ..... Mass
Wagner Electric Co. ..... 6400 Plymouth St. Louis 30 ..... Mo

MOTORS—D-C

AEG, Adv Pg 113-A ..... Nuetheuer, Frankfurt/Main, Germany
A.E.I. Ltd. ..... 33 Grosvenor Pl. London SW1, Eng
Air Marine Motors, Inc. ..... 389 Bay View Ave. Amityville ..... NY
Alloheme Accessories Corp. ..... 1434 Chestnut Ave. Hillside 5 ..... NJ
Allis Co., Louis ..... 427 E Stewart St. Milwaukee 7 ..... Wis
ALLIS-CHALMERS MFG. CO.,
Adv. Pgs. 109-111 ..... 935 S 70th St. Milwaukee 1 ..... Wis
Alsthom, Nuclear Div. ..... 38, Ave. Kleber, Paris 16, France
American Bosch Arma Corp. ..... 320 Fulton Ave. Hempstead ..... NY
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,
Adv Pg 112-D ..... Charleroi ..... Belg
AVIEN, INC. Adv Pg 104 ..... 38-15 Northern Blvd. Woodside 77 ..... NY
Bendix Corp. Eclipse Pioneer Div. ..... Teterboro ..... NJ
Bowmar Instrument Corp. ..... 8000 Ruffton Rd. Fort Wayne ..... Ind
British Electrical Repairs Ltd. ..... 10 Charlotte St. Manchester 1 ..... Eng
Canadian Westinghouse Co. Ltd. ..... Box 510, Hamilton, Ontario, Canada
Eastern Air Devices, Inc. Div. Norbute Corp.
385 Central Ave. Dover ..... NH
Electric Indicator Co. Inc. ..... Camp Ave. Stamford ..... Conn
Elecrun Dynamics Div.
Gen. Dynamics Corp. ..... 168 Ave. A & North St. Bayonne ..... NJ
Fuji Electric Mfg. Co. Ltd. ..... 2-6 Marunouchi, Chiyoda-ku, Tokyo ..... Jap
Garrett Corp. ..... 9851 Sepulveda Blvd. Los Angeles 45 ..... Cal
General Controls Co. ..... 801 Allen Ave. Glendale 1 ..... Cal
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ..... 1 River Rd. Schenectady 5 ..... NY
General Electric Co. Ltd. of England ..... Erith, Kent, England
Hayden Co., A. W. ..... 286 N Elm St. Waterbury ..... Conn
Hitachi, Ltd. ..... 1-4 Marunouchi, Chiyoda-ku, Tokyo ..... Jap
Hoover Electric Co ..... Port Columbus Arpt, Columbus 19 ..... Ohio
Hydro Aire Co. Div. Crane Co. ..... 2000 Winona Ave. Burbank ..... Cal
KEARFOTT DIV. GEN. PRECISION, INC.
Adv Pg 221 ..... 1150 McBride Ave. Little Falls ..... NJ
Oerlikon Engineering Co. ..... Zurich 50, Switzerland
Redmond Co. Inc. ..... 201 Monroe St. Owosso ..... Mich
Reliance Electric & Engineering Co. ..... 24701 Euclid Ave. Cleveland 17 ..... Ohio
Robbins & Myers, Inc. ..... 1345 Lagonda Ave. Springfield ..... Ohio
Sangamo Electric Co. ..... 11 & Converse Sts. Springfield Ill
Smith Corp., A. O., Atomic & Process Equip. Div. ..... 3533 N 27 St. Milwaukee 1 ..... Wis
Technology Instrument Corp ..... 531 Main St. Acton ..... Mass

MOTORS—HYDRAULIC

Alsthom, Nuclear Div. ..... 38, Ave. Kleber, Paris 16, France
American Bosch Arma Corp. ..... 320 Fulton Ave. Hempstead ..... NY
California Tech. Ind. Div. Textron Inc. ..... 14831 Old County Rd. Belmont ..... Cal
Chamberlain Ind. Ltd. Stafle Wks. ..... Argall Ave. Leyton E10, England
Eastern Industries Div. LFE, Inc. ..... 109 Skiff St. Hamden 14 ..... Conn
Hydro Aire Co. Div. Crane Co. ..... 2000 Winona Ave. Burbank ..... Cal
Keelavite Hydraulics Ltd. ..... Allesley, Coventry, Warwickshire, Eng
S. O. M. ..... 125 bd Davout, Paris 20 ..... Fr
Vickers-Armstrongs (Engrs) Ltd. ..... Broadway, Westminster, London SW 1 ..... Eng

MOTORS—SERVO

A.E.I. Ltd. ..... 33 Grosvenor Pl. London SW1, Eng
Alsthom, Nuclear Div. ..... 38, Ave. Kleber, Paris 16, France
American Electronics Inc. ..... 1586 E Sun Ave. Fullerton ..... Cal
AVIEN, INC. Adv Pg 104 ..... 38-15 Northern Blvd. Woodside 77 ..... NY
Bendix Corp. Eclipse Pioneer Div. ..... Teterboro ..... NJ
Bowmar Instrument Corp. ..... 8000 Ruffton Rd. Fort Wayne ..... Ind
Brown, Ltd., S. G. ..... Shakespeare St. Watford, Herts ..... Eng
Clifton Precision Products Co, Inc. ..... 8000 State Rd. Drexel Hill ..... Pa
Eastern Air Devices, Inc. Div. Norbute Corp.
385 Central Ave. Dover ..... NH
Electric Indicator Co. Inc. ..... Camp Ave. Stamford ..... Conn
Evershed & Vignoles, Ltd. Acton Lane Wks. ..... Chiswick, London W4 ..... Eng
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ..... 1 River Rd. Schenectady 5 ..... NY
General Electric Co. Ltd. of England ..... Erith, Kent, England
Helipot Div. of Beckman Instruments, Inc. ..... 2500 Harbor Blvd. Fullerton ..... Cal
Hodge Controls Div. Ortron Corp. ..... 105 River Rd. Cos Cob ..... Conn
Hoover Electric Co ..... Port Columbus Arpt, Columbus 19 ..... Ohio
KEARFOTT DIV. GEN. PRECISION, INC.
Adv Pg 221 ..... 1150 McBride Ave. Little Falls ..... NJ
MINN.-HONEYWELL REG. CO. MIL. PRODS. GROUP,
Adv. Pgs. 138, 140 ..... Wayne & Walnut Avens. Phila. 44 ..... Pa
Muirhead Instruments Inc. ..... 442 Lexington Ave. New York 17 ..... NY
Oerlikon Engineering Co. ..... Zurich 50, Switzerland
Reliance Electric & Engineering Co. ..... 24701 Euclid Ave. Cleveland 17 ..... Ohio
Sangamo Electric Co. ..... 11 & Converse Sts. Springfield Ill
Servomechanisms Inc. ..... 200 Aviation Blvd. El Segundo ..... Cal
Siemens & Halske AG ..... Rheinbreitbach, 50, Karlsruhe ..... Ger
Sperry Gyroscope Co. Div. Sperry Rand Corp. ..... Great Neck ..... NY
Superior Electric Co., The ..... 383 Middle St. Bristol ..... Conn
Tapco Div. Thompson Ramo Wooldridge Inc. ..... 23555 Euclid Ave. Cleveland 17 ..... Ohio
Technology Instrument Corp ..... 531 Main St. Acton ..... Mass
Universal Match Corp. Armament Div. ..... 472 Paul Ave. St. Louis 35 ..... Mo
Vectric Control Equipment Ltd. ..... 30 Bouverie St. London E C 4 ..... Eng

MOUNTINGS—SHOCK & ANTIVIBRATIONAL

Allied Research Associates, Inc. ..... 43 Leon St. Boston 15 ..... Mass
American Felt Co. ..... Glenville Rd. Glenville ..... Conn
Barry Controls Div. Barry Wright Corp. ..... 700 Pleasant St. Watertown 72 ..... Mass
Electric Boat Div. Gen. Dynamics Corp. ..... Industrial Services Dept. 000, Groton ..... Conn
Felters Co., The ..... 210 South St. Boston 11 ..... Mass
Hamilton Kent Mfg. Co. ..... 407 Grant, Kent ..... Ohio
Knapp Construction Co., Andrew ..... 23-15 Borden Ave. Long Island City 1 ..... NY
Knapp Mills, Inc. ..... 23-15 Borden Ave. LIC 1 ..... NY
Lord Mfg. Co. ..... 1635 W 12 St. Erie ..... Pa
Monsanto Mfg. Co. ..... 806 S San Fernando Blvd. Burbank ..... Cal
Pye, Ltd ..... St. Andrews Rd. Cambridge ..... Eng
Research Inc. ..... Box 6104, Edina Sta. Minpls 56 ..... Minn

NEUTRON DETECTORS
See CHAMBERS—FISSION
CHAMBERS—IONIZATION, NEUTRON
COUNTERS—RADIATION
DOSIMETERS—RADIATION
SCANNERS—NEUTRON

NEUTRON-FLUX MONITORS
See DOSIMETERS—RADIATION
FOILS—NEUTRON-DETECTION
MONITORS—RADIATION
SCANNERS—NEUTRON-FLUX

NEUTRON GENERATORS
See ACCELERATORS
GENERATORS—NEUTRON

NEUTRON IRRADIATORS—ISOTOPIC SOURCE

AMF ATOMICS, Adv. Pgs. 75, 77, 99 ..... 140 Greenwich Ave. Greenwich ..... Conn
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV.,
Adv. Pgs. 115, 201 ..... Box 93, Ottawa, Ont ..... Can
Atomic Lab Sub. Comco ..... 2086 Claremont Ave. Berkeley 5 ..... Cal
Atomics International Div. NAA Inc. ..... Box 309, Canoga Park ..... Cal
Buchler & Co ..... Frankfurter Str. 594, Braunschweig ..... Ger
Equipment Atomicos Brasilian Ltda. ..... Box 2594, Rio de Janeiro ..... Braz
HAZLETON NUCLEAR SCIENCE CORP.
Adv Pg 56 ..... 4862 Fabian Way, Palo Alto ..... Cal
Isotopes Specialties Co. ..... Box 608, Burbank ..... Cal
NUCLEAR-CHICAGO CORP.,
Adv. Pgs. 34-37 ..... 340 E Howard Ave. Des Plaines Ill
Nuclear Consultants Corp. ..... 9645 Manchester Rd. St. Louis 19 ..... Mo
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),
Adv. Pgs. 212, 219, 221 ..... 1000 Vanore St. Apollo ..... Pa
Precision Ltd. ..... 56 Princess St. Hanover Sq, London W1 ..... Eng
Philips Electronic Instruments ..... 750 S Fulton Ave. Mt. Vernon ..... NY
Radiation Dynamics Inc. ..... Westbury Ind. Pk. Westbury ..... NY
RADIATION CORP. & ACCESSORIES CORP.
Adv. Pg. 3rd Cover ..... 665 Merrick Rd. Lynbrook ..... NY
RADIUM CHEMICAL CO. INC. Adv Pg 12 ..... 161 E 42nd St. New York 17 ..... NY
REACTOR EXPERIMENTS, INC.
Adv Pg 26 ..... 140 Hacker Blvd. Belmont ..... Cal
U. S. NUCLEAR CORP., Adv Pg 127 ..... 801 N Lake St. Box 2822, Burbank ..... Cal

NEUTRON SOURCES
See SOURCES—RADIOACTIVE

NICKEL
See METALS, ALLOYS & COMPOUNDS

NIOBIUM
See METALS, ALLOYS & COMPOUNDS

NITROGEN
See Under GASES

NONDESTRUCTIVE TESTING
See TEST EQUIPMENT—NONDESTRUCTIVE
SERV. & CONS'LT: TESTING, NONDESTRUCTIVE

NOZZLES—SPRAY

Buffalo Forge Co. ..... 400 Broadway, Buffalo 5 ..... NY
De Vilbiss Co. ..... 300 Phillips Ave. Toledo 1 ..... Ohio
Dynatech Corp. ..... 600 Massachusetts Ave. Cambridge 39 ..... Mass
Graver Water Conditioning Co. ..... 216 W 14 St. New York 11 ..... NY
Tosi, S.p.A., Franco ..... Legnano, Milan ..... Ital
Tomalt-Waring Co. ..... 108 E Mermaid Lane, Philadelphia 18 ..... Pa

NUCLEAR-FACILITY DESIGN—NONREACTOR
See SERV. & CONS'LT: NUCLEAR-FACILITY DESIGN, NONREACTOR

NUCLEAR FUEL ELEMENTS
See FUEL ELEMENTS

NUCLEAR-MATERIAL ACCOUNTABILITY
See SERV. & CONS'LT: NUCLEAR-MATERIAL ACCOUNTABILITY

NUCLEAR PHYSICS
See SERV. & CONS'LT: NUCLEAR PHYSICS

NUCLEAR POWER PLANTS
See POWER PLANTS—NUCLEAR

NUCLEAR REACTORS
See REACTORS

O-RINGS
See Also GASKETS

APM Corp.	41 Branch St. Englewood	NJ
ADVANCED PRODUCTS CO., Adv Pg 224	39 Broadway, North Haven	Conn
Allied Plastics Supply Corp.	75 Cliff St. New York 38	NY
Auburn Mfg. Co.	800 Stack St. Middletown	Conn
Bacon Industries, Inc.	192 Pleasant St. Watertown	Mass
Birnbach Radio Co. Inc.	145 Hudson St. New York 13	NY
Chicago Allis Mfg. Co.	113-123 N Green St. Chicago 7	Ill
Chicago Gasket Co.	1271 W North Ave, Chicago 22	Ill
Durham Co. Inc.	600 N Finley St. Dayton 4	Ohio
Edwards High Vacuum, Inc.	3279 Grand Island Blvd. Grand Island	NY
Federal-Mogul Bower Bearings, Inc.	11801 Shoemaker Ave, Detroit 18	Mich
Johns-Manville	22 E 40th St, New York 16	NY
Seybertz-Manhattan, Inc.	Arnold & Stiegel Sts. Manheim	Pa
Shanhan & Co., W. S.	11617 W Jefferson Blvd, Culver City	Cal
Sperle Mfg Co Div U.S. Ceramic Tile Co	Dover	Ohio
Vacuum Ind. Applications, Ltd.	Netherton Rd. Wishaw, Lanarkshire	Scot
Vacuum Research (Cambridge) Ltd.	Quayside, Bridge St. Cambridge	Eng

OHMMETERS
See Also REGOHMMETERS

AEG, Adv Pg 113-A	Hochheim, Frankfurt/Main, Germany	
Associated Research, Inc.	3760 W Belmont Ave, Chicago 18	Ill
Avelay Electric, Ltd.	5, Dickenshire, Essex, England	
Barnes Development Co	513 W Baltimore Pike, Lansdowne	Pa
Biddle Co., James G.	1316 Arch St, Philadelphia 7	Pa
Dymec, Div. Hewlett-Packard Co.	395 Page Mill Rd, Palo Alto	Cal
Freeland & Vigneron, Ltd. Acton Lane Wks.	Chiswick, London W4	Eng
FRANKLIN ELECTRONICS, INC. Adv Pg 230	E Fourth St. Bridgeport	Pa
General Motors, Inc.	Box 1791, Grand Junction	Colo
Heath Co.	Benton Harbor	Mich
Hewlett-Packard Co.	1501 Page Mill Rd, Palo Alto	Cal
Hickok Electrical Instrument Co.	10601 Dupont Ave, Cleveland 8	Ohio
Industrial Instruments, Inc.	89 Commerce Rd. Dept. H, Cedar Grove	NJ
LAMBDAVERE ELECTROMETER CO. Adv Pg 256	641 Sonora Ave, Glendale 1	Cal
Leeds & Northrup Co.	4901 Stenton Ave, Phila 44	Pa
Mid-Eastern Electronics, Inc.	32 Commerce St, Springfield	NJ
Multiscal Instruments Inc.	441 Lexington Ave, New York 17	NY
New London Instrument Co. Inc.	82 Union St. New London	Conn
Non-Linear Systems, Inc.	Del Mar Airport, Del Mar	Cal
Pye & Co. Ltd., W. G.	Tech St. Cambridge	Eng
RADIO CORP. OF AMERICA, ELECTRON TUBE DIV. Adv Pg 23	415 S 5th St. Harrison	NJ
SHIWA ELECTRIC INSTRUMENT WKS. LTD. Adv Pg 148	1077 Kaigaido, Kawaguchi-machi, Kitatama-gun, Tokyo	Jap
Siemens & Halske AG	Rheinbrückenstr. 50, Karlsruhe, Germany	
Simpson Electric Co. Div. Amer Gage & Mach Co.	5200 W Kinzie St, Chicago 44	Ill
Smith-Florence, Inc.	Overlake Ind. Pk. Box 717, Redmond	Wash
Tolerance Instruments Corp.	39-18 29th St, LIC 1	NY
WELCH SCIENTIFIC CO. Adv Pg 192	1515 Sedgwick St. Chicago 10	Ill

OPTICAL INSTRUMENTS & PARTS
See Also MICROSCOPES—OPTICAL
PERISCOPES

Advanced Technology Labs.	360 Whisman Rd. Mountain View	Cal
American Optical Co. Safety Prods. Div.	25 Mechanic St. Southbridge	Mass
Atomic Lab Sub. Center	3000 Claremont Ave, Berkeley 6	Cal
Barbier, Benard & Turenne, Anc. Ets.	62 rue Cortal, Paris 15e	Fr
Bausch & Lomb, Inc.	80402 Bausch St, Rochester 2	NY
Beckman & Whitley Inc.	900 E San Carlos Ave, San Carlos	Cal
Bolsen & Fils, Ets. J.	14 bis, Rue Denis Papin, Puteaux (Seine)	Fr
Broadhurst Clarkson & Co. Ltd.	69 Farringdon Rd, London EC1	Eng
Bold Optical Co.	1000 Beech Ave. Pittsburgh 33	Pa
Crystals S. A.	Case Centrale 186, Geneva 2, Bell	
Eichner Instruments, L. G.	19 Schage St. Clifton	NJ
Engelhard Industries, Inc.	113 Astor St. Newark 5	NJ
Engis Equipment Co.	431 S Dearborn St, Chicago	Ill
Etronics Corp. Scientific Instruments Div.	10 W 60th St, New York 36	NY
Fairchild Camera & Inst. Corp. Defense Prods. Div.	300 Robbins Ln. Syosset	NY
Fennell Electric, Inc	Industrial Pk. 61, Plainview	NY
FISH-SCHURMAN CORP. Adv Pg 234	70 Portman Rd. New Rochelle	NY
Gaertner Scientific Corp.	1327 Wrightwood Ave, Chicago	Ill
Hacker & Co. Inc., William J.	Box 646, West Caldwell	NJ
Hilger & Watts, Ltd.	98 St. Pancras Way, London NW 1, Eng	
HORIBA INSTRUMENTS, INC. Adv Pg 207	Hakashimatsu Sanjo, Nakakyo, Kyoto	Jap
ISOMET CORP., Adv Pg 94	433 Commercial Ave. Palisades Park	NJ
KOLLMORGEN CORP., Adv. Pgs. 24, 25	347 King St. Northampton	Mass
LAMBDAVE INC. SUB. DYNALECTRON INC. Adv Pg 256	7444 W Wilson Ave, Chicago 31	Ill
LINEN INSTRUMENT CO. Adv Pg 258	3010 Chancellor St. Philadelphia 3	Pa
Lumex Engineering Corp.	63 Clark Ave, Northampton	Mass
Mosaic Fabrications Inc.	905 Chapin St. Southbridge	Mass
Optical Works Ltd.	32 The Mall, Ealing W5, England	
Pacific Transducer Corp.	11836 SW Pico Blvd, Los Angeles 64	Cal
Perkin-Elmer Corp.	Norwalk	Conn
Perkin-Elmer Corp. Electro-Optical Div.	5670 E Washington Blvd, L A 22	Cal
Pittsburgh Plate Glass Co.	632 Fort Duquesne Blvd, Pittsburgh 22	Pa
Research Development Manufacture, Inc.	420 E Collom St, Philadelphia 44	Pa
Research Equipment Co.	502 Sunnyside, Wheaton	Ill
S. O. M.	122 bd Davout, Paris 20	Fr
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Unitron Instrument Co.	66 Needham St, Newton Highlands, 61	Mass
Wallin Optical Systems Inc.	15823 Ventura Blvd, Tarzana	Cal
Warner Associates	46 Franklin St, Framingham	Mass
Zenith Optical Lab.	75 Main St, Dobbs Ferry	NY

OSCILLOGRAPHS

AEG, Adv Pg 113-A	Hochheim, Frankfurt/Main, Germany	
Brush Instruments Div. Clevite Corp.	37th & Perkins, Cleveland 14	Ohio
Cambridge Instrument Co., Ltd.	22 Grosvenor Pl, London SW1, Eng	
Consolidated Electrodynamics Corp.	300 Sierra Madre Villa, Pasadena	Cal
Cossor Instruments Ltd.	Highbury Gr, London N5, England	
Dr. Visco KG	29 Rosenhagweg, Bonn	Ger
Engis Equipment Co	431 S Dearborn St, Chicago	Ill
Epic, Inc.	180 Nassau St. New York 38	NY
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
Honeywell Div. Minneapolis-Honeywell Reg Co.	2800 E Evans Ave, Denver 22	Colo
Honeywell Controls, Ltd.	Pinebelford Ave, Toronto, Ont Canada	
L'Electronique Appliquee	25 rue de Dorome Finley, Paris 12, Fr	
MINN-HONEYWELL REG CO. MIN. PROD GROUP, Adv. Pgs. 138, 140	Wayne & Hankin Aves. Phila. 44	Pa
Photron Instrument Co.	6530 Detroit Ave, Cleveland 2	Ohio
RADIO CORP OF AMERICA, ELECTRON TUBE DIV. Adv Pg 23	415 S 5th St. Harrison	NJ
Sfmt Desjardins	13 rue Perier, Montrouge, Seine	Fr
Sanborn Co.	175 Wyman St, Waltham 54	Mass
Siemens & Halske AG	Rheinbrückenstr. 50, Karlsruhe, Germany	
Southern Instruments, Ltd.	Frimley Rd. Camberley, Surrey, England	
TERMINAL RADIO INTERNATIONAL LTD. Adv Pg 113-C	240 W 17th St. New York 11	NY
TOKYO SHIBAURA ELECTRIC CO. LTD. Adv Pg 223	12 Yunaka-cho 1-Chome, Chiyoda-ku, Tokyo	Jap

OSCILLOSCOPES

A.E.I. Ltd.	30 Grosvenor Pl, London SW1, Eng	
Advanced Technology Labs.	985 Whisman Rd, Mountain View	Cal
Avelay Electric, Ltd.	5, Dickenshire, Essex, England	
Canadian Marconi Co.	2442 Trenton Ave, Montreal 16	Can
Cardwell Research & Electronics Ltd.	Scotts Rd, Smethwick, Mdlx.	Eng
CENTRAL SCIENTIFIC CO. Adv Pg 112	1700 Irving Park Rd, Chicago 13	Ill
Cossor Instruments Ltd.	Highbury Gr, London N5, England	
Dynacom Radio Ltd.	St. Peter's Rd. Parsa Place, Maidenhead, Berks	Eng
Elcl Electronics Ltd.	Hayes, Middlesex	Eng
EDGERTON, GERMESHAUSEN & GRIER, INC. Adv Pg 105	160 Brookline Ave. Boston 15	Mass
Engis Equipment Co	431 S Dearborn St, Chicago	Ill
Epic, Inc.	180 Nassau St. New York 38	NY
Fairbanks, Morse & Co.	100 Electra Ln. Yonkers	NY
Heath Co.	Benton Harbor	Mich
Hewlett-Packard Co.	1501 Page Mill Rd, Palo Alto	Cal
Hickok Electrical Instrument Co.	10601 Dupont Ave, Cleveland 8	Ohio
L'Electronique Appliquee	25 rue de Dorome Finley, Paris 12, Fr	
Lumetron Electronics, Inc.	116 County Courthouse Rd, New Hyde Park	NY
Miles Hivolt Ltd	Old Shoreham Rd, Shoreham-by-Sea, Sussex	Eng
Millen Mfg. Co., James	150 Exchange St, Malden	Mass
NUCLEAR DATA INC., Adv. Pgs. 90, 91	3223 W Beeline Hwy. Bellevue	Wa
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 187	Eindhoven	Neth
Plasmatronics Inc	Centre & Glendale Sts, Easton	Pa
RADIO CORP. OF AMERICA, ELECTRON TUBE DIV. Adv Pg 23	415 S 5th St. Harrison	NJ
Sfmt Desjardins	13 rue Perier, Montrouge, Seine	Fr
S.A.I.P.	30, Rue Gabriel Crie, Malakoff, Seine	Fr
Sanborn Co.	175 Wyman St, Waltham 54	Mass
Schaco Scientific Div. Schaudes & Co.	95 Cliff St. New York 38	NY
Siemens & Halske AG	Rheinbrückenstr. 50, Karlsruhe, Germany	
Solartron Electronic Group Ltd.	Victoria Rd, Farnborough, Hants, Eng	
Southern Instruments, Ltd.	Frimley Rd, Camberley, Surrey, England	
Specialty Electronics Devel. Corp.	151-01 20th Ave, Flushing	NY
Telemarks, Inc.	Box 880, Bayonne	Ore
Telectro Industries Corp.	35-16 37th St, LIC 1	NY
TERMINAL RADIO INTERNATIONAL LTD. Adv Pg 113-C	240 W 17th St. New York 11	NY
TOKYO SHIBAURA ELECTRIC CO. LTD. Adv Pg 223	12 Yunaka-cho 1-Chome, Chiyoda-ku, Tokyo	Jap
Watson Manufacturing, Inc.	Boston Post Rd, Wayland	Mass
WELCH SCIENTIFIC CO. Adv Pg 192	1515 Sedgwick St. Chicago 10	Ill

OVENS
See FURNACES

PACKINGS—JOINT-SEALING
See Also GASKETS

ADVANCED PRODUCTS CO., Adv Pg 224	39 Broadway, North Haven	Conn
Aeroquip-Herman Div.	13814 W Exposition Blvd, L A 66	Cal
ALLIED ENGINEERING & PRODUCTION CORP., Adv Pg 242	2420 Blanding Ave. Alameda	Cal
Allied Plastics Supply Corp.	75 Cliff St. New York 38	NY
Auburn Mfg. Co.	100 Stack St. Middletown	Conn
Conco Packing Co.	6400 Cuinco St. Mamon Grove	Ill
Durham Co. Inc.	600 N Finley St. Dayton 4	Ohio
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
Johns-Manville	22 E 40th St. New York 16	NY
Polypenco Ltd.	Tawin Rd. Welwyn Garden City, Herts	Eng
Seybertz-Manhattan, Inc.	Arnold & Stiegel Sts. Manheim	Pa
SOCIETE RATEAU, Adv Pg 193-T	Rue Rateau La Courneuve, Seine	Fr
Telecomputing Corp.	8155 Aero Dr. San Diego 11	Cal
Tesi, S.p.A., Franco	Legnano, Milan	Ital
Tube Investments Ltd.	Amor House, Birmingham 6	Eng

PACKINGS—MECHANICAL
See SEALS—MECHANICAL

PAINTS—PROTECTIVE
See Also COATINGS—PROTECTIVE

Acme Co.	7861 Rossmoor Ave, Cleveland 57	Ohio
Boddie Products, Inc.	810 E Drayton Ave, Ferndale 20	Mich
CHARLESTON RUBBER CO. Adv Pg 188	7 Rook Industrial Pk. Charleston	SC
Commercial Corp.	84 S 6th St, Brooklyn 11	NY
du Pont de Nemours & Co. Inc., E. I.	Wilmington 98	Del
Fuller Co., Benjamin	4800-37 W Girard Ave, Philadelphia 31	Pa
Glidden Co.	900 Union Commerce Bldg. Cleveland 14	Ohio
Huron Industries	Box 134, Fort Huron	Mich
Kalkhausen, Ets.	26 bd de l'Amiral-Bruix, Paris 16e	Fr
Leyland Paint & Varnish Co. Ltd.	Leyland, Lancs.	Eng
Mobil Oil Co.	150 E 42nd St. New York	NY
Pennsalt Chemicals Corp.	3 Penn Center, Philadelphia 2	Pa
Permagile Corp. of America	36-42 36th St. Woodside	NY
Pittsburgh Plate Glass Co.	632 Fort Duquesne Blvd, Pittsburgh 22	Pa
Pyro Chemical Corp.	880 Main St. Westbury	NY
ROYAL RESEARCH CORP. Adv Pg 21	11404 Dublin Blvd. Hayward	Cal
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Sherwin-Williams Co.	101 Prospective Ave, NW, Cleveland 1	Ohio
United Shoe Machinery Corp. Atomic Power Dept.	Ralph St. Beverly	Mass
Vemac Co.	147 Meadow Rd. Rutherford	NJ

PAPER—RECORDING

Allen Paper & Engineering Co.	Box 155, Wrentham	Mass
Brad & Ejner	Linde Alle 23, Hurum	Den
Brush Instruments Div. Clevite Corp.	37th & Perkins, Cleveland 14	Ohio
D. I. S. I. Nuclear Corp.	Via A. Bonfoni 30, Milan	Ital
du Pont de Nemours & Co. Inc., E. I.	Wilmington 98	Del
Hogan Facsimile Corp. Sub. Telautograph Corp.	630 Greenwich St. New York 14	NY
L'Electronique Appliquee	25 rue de Dorome Finley, Paris 12, Fr	
Limon Industries	330 N Foothill Rd, Beverly Hills	Cal
MINN-HONEYWELL REG CO. MIN. PROD GROUP, Adv. Pgs. 138, 140	Wayne & Hankin Aves. Phila. 44	Pa
Multiscal Instruments Inc.	441 Lexington Ave, New York 17	NY
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	465 Hertel Rd. Lyndonville	NY
Republic Flow Meter Co.	2240 Diversey Pkwy, Chicago 47	Ill
Sensitized Coatings, Ltd.	48 Dingwall Rd. S Croydon, Surrey, Eng	
Southern Instruments, Ltd.	Frimley Rd, Camberley, Surrey	Eng
Westronics Inc.	3005 McCart, Fort Worth	Tex

PELLETING PRESSES
See FABRICATING EQUIPMENT

PERISCOPES
See Also OPTICAL INSTRUMENTS & PARTS

Barbier, Benard & Turenne, Anc. Ets.	62 rue Cortal, Paris 15e	Fr
Bausch & Lomb, Inc.	80402 Bausch St, Rochester 2	NY
Bolsen & Fils, Ets. J.	14 bis, Rue Denis Papin, Puteaux (Seine)	Fr
Bold Optical Co.	1000 Beech Ave. Pittsburgh 33	Pa
D. I. S. I. Nuclear Corp.	Via A. Bonfoni 30, Milan	Ital
Fairchild Camera & Inst. Corp. Defense Prods. Div.	300 Robbins Ln. Syosset	NY
Gaertner Scientific Corp.	1327 Wrightwood Ave, Chicago	Ill
KOLLMORGEN CORP., Adv. Pgs. 24, 25	347 King St. Northampton	Mass
LINOX INSTRUMENT CO. Adv Pg 258	2010 Chancellor St. Philadelphia 3	Pa
Lumex Engineering Corp.	63 Clark Ave, Northampton	Mass
Lumoscope Div. Gen. Precision, Inc.	Glendale 1	Cal
Optical Works Ltd.	32 The Mall, Ealing W5, England	
Perkin-Elmer Corp.	Norwalk	Conn
Perkin-Elmer Corp. Electro-Optical Div.	5670 E Washington Blvd, L A 22	Cal
S. O. M.	122 bd Davout, Paris 20	Fr
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Wallin Optical Systems Inc.	15823 Ventura Blvd, Tarzana	Cal

pH METERS
See CONTROLS—pH
METERS—pH

PHANTOMS—RADIATION-DOSIMETRY

Atlantic Research Labs, Inc.	49-14 30 St, Long Island City 1	NY
AMERICAN NUCLEAR CORP. Adv Pg 198	Box 428, Oak Ridge	Tenn
ATOMIC ACCESSORIES, INC., Adv Pg 286	811 W Merrick Rd, Valley Stream	NY
Atomic Devel. & Machine Corp.	15-04 120 St, College Point 56	NY
Berwick Associates, Inc	130 E 53rd St, New York 22	NY
D.I.S.I. Nuclear Corp.	Via A. Doubni 36, Milan	Ital
Lockheed Aircraft Corp.	Box 551, Burbank	Cal
MERLIN, INC., GEORGE T. Adv Pg 142	132 Nassau St, New York 38	NY
Nuclear Consultants Corp.	1045 Manchester Rd, St. Louis 19	Mo
Nuclear Enterprises (GB) Ltd.	Sighthill, Edinburgh 11	Scot
NUCLEAR ENTERPRISES LTD. Adv Pg 194	550 Berry St, Winnipeg 21	Man
NUCLEONIC CORP. OF AMERICA, Adv Pg 202	196 Dupont St, Brooklyn 22	NY
Picker X-Ray Corporation	2275 Mamaroneck Ave, White Plains	NY
Reuter-Stokes Electronic Components, Inc.	2149 Hamilton Ave, Cleveland 14	Ohio

PHOSPHORS—SCINTILLATION
See SCINTILLATORS

PHOTOGRAPHIC FILMS FOR DOSIMETERS

Berwick Associates, Inc	130 E 53rd St, New York 22	NY
D.I.S.I. Nuclear Corp.	Via A. Doubni 36, Milan	Ital
du Pont de Nemours & Co. Inc., E. I.	Wilmington 98	Del
Eastman Kodak Co.	343 State St, Rochester 4	NY
LAMBARDE, JR. & CO., R. S. Adv Pg 12	1928 25th St, Bethesda	Md
Nuclear Consultants Corp.	1045 Manchester Rd, St. Louis 19	Mo
Radiation Dosimetry Co.	4047-49 Transport St, Palo Alto	Cal

PHOTOGRAPHIC MATERIALS FOR RECORDING INSTRUMENTS

du Pont de Nemours & Co. Inc., E. I.	Wilmington 98	Del
Eastman Kodak Co.	343 State St, Rochester 4	NY
POLAROID CORP. TECH. SALES DEPT. Adv Pg 102	730 Main St, Cambridge	Mass

PHOTOGRAPHIC PLATES & EMULSIONS—NUCLEAR

Eastman Kodak Co.	343 State St, Rochester 4	NY

PHOTOMETERS—PLANE

BAIRD-ATOMIC INC. Adv Pg 67	33 Hulsmeety Rd, Cambridge 39	Mass
Baldwin Industrial Controls	Dartford, Kent, England	
Biddle Co., James G.	1316 Arch St, Philadelphia 7	Pa
Engis Equipment Co.	431 S Dearborn St, Chicago	Ill
Gallenkamp & Co. Ltd., A.	Sun St, London, E. C. 2, England	
GELMAN INSTRUMENT CO. Adv Pg 223	Box 1148-H, Chelsea	Mich
Hilger & Watts, Ltd.	98 St. Pancras Way, London NW 1, Eng	
Jarrell-Ash Co.	26 Farwell St, Newtonville 60	Mass
Hogarth & Zembra (Canada) Ltd	4 Bernfield Rd, Toronto 14	Ont
Perkin-Elmer Corp.	Norwalk	Conn
Process & Instruments Corp.	16 Stone Ave, Brooklyn 33	NY
Water Associates	45 Franklin St, Framingham	Mass

PHOTOMETERS—LIGHT-COMPARING

American Instrument Co, Inc.	8030 Georgia Ave, Silver Spring	Md
Baldwin Industrial Controls	Dartford, Kent, England	
Electro-Physics Co.	207-L Broadway, New York 7	NY
Engis Equipment Co.	431 S Dearborn St, Chicago	Ill
Keuffel & Esser Co. Scientific Instrument Div.	38 W 48th St, New York 36	NY
GELMAN INSTRUMENT CO. Adv Pg 223	Box 1148-H, Chelsea	Mich
LAMBARDE INC. SEE DYNALECTRON INC. Adv Pg 204	7444 W Wilson Ave, Chicago 31	Ill
Hogarth & Zembra (Canada) Ltd	4 Bernfield Rd, Toronto 14	Ont

PHOTOMULTIPLIER TUBES
See TUBES—ELECTRON

PIPE & TUBING
See Also PIPE JOINTS
PIPE & TUBING—LINED

1. ALUMINUM
2. CARBON STEEL
3. CERAMIC
4. COPPER
5. CORROSION-RESISTANT
6. GLASS
7. GRAPHITE
8. NICKEL & NICKEL ALLOY
9. NIOBIUM
10. PLASTIC
11. RUBBER
12. SEAMLESS
13. STAINLESS STEEL
14. TANTALUM
15. TITANIUM
16. WELDED
17. ZIRCONIUM

Aeroquip Corp. 5-11-12-13	300 S East Ave, Jackson	Mich
Alco Products, Inc. 9-13-16	Box 1005, Schenectady 5	NY
Allegheny Ludlum Steel Corp. 5-12-17-16-17	Oliver Bldg, Pittsburgh 22	Pa
Allied Plastics Supply Corp. 10	75 Cliff St, New York 38	NY
Allied Systems Products, Inc. 10	Whitney Bldg Clark St, Conneaut	Ohio
Alloy Flange & Fitting Corp., 5-6-13-15	29-30 Review Ave, LIC 1	NY
Aluminum Co. of America, 1	1501 Alcoa Bldg, Pittsburgh 19	Pa
Amercoat Corp. 10	4809 Firestone Blvd, South Gate	Cal
Anaconda Can Iron Pipe Co, 1-5-6-8	Box 2603, Birmingham 2	Ala
American Metal Products Co. 9-12-13-17	5053 Lincoln Ave, Detroit 4	Mich
Atlas Titanium, Ltd. 12-14-15-16-17	Centre St, Welland, Ont.	Can
Aux. Ets. Aubert & Duval, 13	41 rue de Villiers, Neuilly-sur-Seine	Fr
Auburn Mfg. Co. 10-11	500 Stack St, Middletown	Conn
AVERY & SAUL CO. 10, Adv Pg 73	115 Rindge Ave, Cambridge	Mass
BTR Industries Ltd. 5-10-11	Vincent Sq, London, SW1	Eng
Babcock & Wilcox Co. Tubular Products Div. 1-9-12-13-16	Beaver Falls	Pa
Babcock & Wilcox Ltd. 3	209 Euston Rd, London NW 1	Eng
Bethlehem Steel Corp. 6-9-16	701 E 3rd St, Bethlehem	Pa
Brisbach Radio Co. Inc. 10	145 Hudson St, New York 13	NY
Bishop & Co., J., Platinum Works, 1-8-9-12-13-14-15-16-17	Malvern	Pa
Belton & Sons Ltd., Thomas, 4	168 Regent St, London W1	Eng
Brem Metallurgical-Chemical Co. 8-9-14-16-17	2500 Grant Ave, Philadelphia 16	Pa
Bridgeport Brass Co. 8-9-13	30 Grand St, Bridgeport 2	Conn
Brush Beryllium Co., 3	2999 Euclid Ave, Cleveland 3	Ohio
CEI Corp. 3	Cottage Pl, Missoula	MT
Caird Ltd., Francis, 1-5-8-12-13	Africa House, Kingsway, London WC 2	Eng
Carborundum Co. Refractories Div. 3-5	Perth Amboy	NJ
Carborundum Metals Co. 17	Akron	NY
CARPENTER STEEL CO. 5-8-12-13-14-15-16-17 Adv Pg 92	101 W Bern St, Reading	Pa
CENTRAL SCIENTIFIC CO. 16-17 Adv Pg 112	1700 Irving Park Rd, Chicago 13	Ill
Chase Brass & Copper Co. 1-6-8-9-12-13-17	236 Grand St, Waterbury	Conn
Combustion Engineering, Inc. 13-16	200 Madison Ave, New York 16	NY
Connecticut Rubber & Plastic Co. Div. U. S. Stoneware Co. 10	Box 831, Cleveland	Ohio
Consolidated Western Steel Div. U. S. Steel Corp. 2-13-16	Box 2115, Terminal Annex, LA 54	Cal
Corning Glass Works, Shielding Radiation, 6	Corning	NY
Crucible Steel Co of America, 2-5-12-15-16	Box 88, Pittsburgh 30	Pa
Damascus Tube Co. 16	Box 71, Greenville	Pa
Dunsiple & Fittings, Ltd. 5-10	58 Kingsway, London, WC2	Eng
Durion Co, Inc. 8	450 N Findlay St, Dayton 4	Ohio
Dynamit Nobel AG Plastics Div. 7	Troisdorf bei Koln, Germany	
Fansteel Metallurgical Corp., 9-14	North Chicago	Ill
Fischer & Porter Co. 6	50 Warminster Rd, Warminster	Pa
FISH-SCHURMAN CORP. 6, Adv Pg 234	70 Freeman Rd, New Rochelle	NY
Fleximonx Div. Crimson & Steele Inc. 10	460 E Devon Ave, Bartlett	Ill
General Alloys Co. 8-13	400 W First St, Boston 27	Mass
General Aniline & Film Corp. 7	250 Vesey Ave, Tonawanda 2	NY
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. 7, Adv Pg 200	Box 608, San Diego 12	Cal
General Electric Co. Laminated Prods Dept. 7	Coshocton	Ohio
General Electric Co. Lamp Metals & Components Dept. 13	21800 Tungsten Rd, Cleveland 17	Ohio
General Scientific Equ Co. 10	Limekiln & Williams, Phila 50	Pa
Gordon Co., Claud S. 1-5-6-8-9	629 W 30 St, Chicago 16	Ill
GRAY TOOL CO. 5, Adv Pg 72	7135 Ardmore, Box 2291, Houston 1	Tex
GREAT LAKES CARBON CORP. 7, Adv Pg 181	18 E 48th St, New York	NY
Hadfields Ltd. 13	Vulcan Rd, Sheffield 9	Eng
HARVEY ALUMINUM, 1-8-12-15-17, Adv Pg 39	19200 S Vermont Ave, Torrance	Cal
Haveg Industries Inc. 5-10	900 Greenbank Rd, Wilmington 8	Del
Haynes Stellite Co. Div. of UCC, 5-8	270 Park Ave, New York 17	NY
Hommel Co., O., 3	Box 475, Pittsburgh 30	Pa
Horton-Angel Co. 1-4-8-12	119 Brain St, Attleboro	Mass
Hupp Div. Hallmark Industry-Industrial, 1-5-9-8-12-13-16	Box 691, Pasco	Wash
Huntington Alloy Prods Div. Intl. Nickel Co. Inc. 5-8	Huntington 17	W Va
Imperial-Eastman Corp. 16	6500 W Howard St, Chicago 48	Ill
Isolastic Mfg. Corp. 3	37 [illegible] Ave, Stirling	NJ
JENAER GLASWERKE SCHOTT & GEN. 6, Adv Pg 172-8	19 Hattenbach, Mainz-Finth	W Ger
Job-O-Gutsbeck, 3	Brisbek, Bz. Hmb.	Ger
John-Manville, 5-10	22 E 40th St, New York 16	NY
Jones & Laughlin Steel Corp. 9-12-16	3 Gateway Center, Pittsburgh 30	Pa
Knapp Mills, Inc., 8	23-16 Borden Ave, LIC 1	NY
Kawecki Chemical Co. Inc. 9-14	230 E 42nd St, New York	NY
Knapp Construction Co., Andrew, 5	23-15 Borden Ave, Long Island City 1	NY
KRUEGER FABRICATING CO. INC. 15-16, Adv Pg 222	Box 1204, Madison 1	Wis
Kuhlmann, Ets. 9	35 bd de l'Amiral-Bruix, Paris 16e	Fr
Laboratory Equipment Corp., 3	St. Joseph	Mich
Ladish Co. 1-8-9-13	5481 S Packard Ave, Cudahy	Wis
Lapp Insulator Co. Inc. 2	139 Sumner St, LeRoy	NY
Lesher Boiler & Engineering Corp. 16	2001 S Wolcott Ave, Chicago 8	Ill
Lorraine-Escaut, 2-12-13-16	7 Rond-Point Dugueslin, Paris 16e	Fr
Lumenus Rubber Co., 11	Box 2191, Trenton 7	NJ
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. 8-9-12-13-14-15-17, Adv Pg 3	Box 888, Attleboro	Mass
Mica Insulator Div., MMM, 10	797 Broadway, Schenectady 1	NY
Moore & Co., Samuel 1-6-10	Main & Orchard Sts, Mantua	Ohio
NATIONAL ANNEALING BOX CO. 2-5-6-13-16, Adv Pg 104	Box 528, Washington	Pa
National Beryllia Corp. 3	1st & Haskell Aves, Haskell	NJ
NATIONAL CARBON CO. DIV. OF UCC, 7, Adv. Pgs. 96, 97	270 Park Ave, New York 17	NY
National Forge Co. 5-8-12-13	Irvine, Warren City	Pa
National Research Corp, 16	70 Memorial Dr, Cambridge 42	Mass
National Valve & Mfg. Co. 5-12-13-16	3131 Liberty Ave, Pittsburgh 1	Pa
National Vulcanized Fibre Co. 10	Maryland Ave & Beach Sts, Wilmington 99	Del
Nuclear Metals, Inc. 5-8-12	Box 222 Concord	Mass
Oregon Metallurgical Corp., 15-17	Box 484, Albany	Ore
Pamlyte Div. St. Regis Paper Co. 10	Enterprise Ave, Trenton	NJ
PECHINEY, 7-8-14-15-17, Adv Pg 199	23 Rue Balzac, Paris, 8me	Fr
PHOENIX-RHEINROHR AG, 2-5-10-12-13-16, Adv Pg 37	August-Thyssen-Str 1, Duesseldorf	Ger
Phoenix Steel Corp., 1-6-8-12	121 Bridge St, Phoenixville	Pa
Pittsburgh Piping & Equipment Co. 8-12-16	158 40th St, Pittsburgh	Pa
Plowden & Thompson Ltd. 3	Stourbridge, Worcs, England	
Polymer Corp. 10	2120 Fairmont, Reading	Pa
Polypenco Ltd. 5-10	Tewin Rd, Welwyn Garden City, Herts	Eng
Penn & Kline Tube Co. Inc. 1-6-8-9-10	Whitehall & Trump, Line Lexington	Pa
PRECISION EXTRUSIONS INC. 7, Adv Pg 93	720 E Green Ave, Bensenville	Ill
Precision Tube Co. Inc. 1-6-8-12-13	Church Rd, & Wissahickon Ave. N Wales	Pa
Raybestos-Manhattan, Inc. 10-11	Arnold & Stingel Sts, Manheim	Pa
Raychem Corp. 10	Oakside at Northside, Redwood City	Cal
Reactive Metals Inc. Sub. Natl. Distillers & Chem. Corp. 5-8-12-14-16-17	Niles	Ohio
Reactor Materials Inc. 1	Box 435, Pennsville	NY
Republic Steel Corp. 5-10-13-16	1441 Republic Bldg, Cleveland 1	Ohio
Resistoflex Corp., 8-10	Woodland Rd, Roseland	NJ
Revere Copper & Brass Inc., 1-6-8-9-12-16	230 Park Ave, New York 17	NY
Reynolds Metals Co., 3	Box 2346, Richmond 18	Va
SANDUSKY FOUNDRY & MACHINE CO. 5-8-9-13, Adv Pg 83	W Market St, Sandusky	Ohio
Savoie-Achaum, Cie Industrielle, 7	10 rue du General Foy, Paris 8e	Fr
Sassenberg Ceramics, Inc. 3	Box 167, Sassenberg	Pa
Schoeller-Bleckmann Stahl Wke Ltd, 5-13-16	2 Wildpretmarkt, Vienna 1	Aus
Scientific Glass Apparatus Co. Inc., 6	108 Lakewood Terr, Bloomfield	NJ
Scovill Mfg. Co. Mills Div. 6-8-12	99 Mill St, Waterbury 20	Conn
Shenkin & Co., W. E., 10	11617 Jefferson Blvd, Culver City	Cal
Sheldon & Co. Inc., M. L., 1-2-3-6-8-7-8-9-10-11-12-13-14-15-16-17	350 Lexington Ave, New York 16	NY
SHOWADENKO K. K., 1-3-7, Adv Pg 112-8	34 Shiba Hyonoto-cho, Minato-ku, Tokyo	Jap
Sigri-Elektrokohlenfabrik GmbH, 7	Meitingen ober Augsburg	Ger
Silvertown Rubber Co., Ltd. 5-10-11	Vincent Sq, London SW1	Eng
Simmering-Graz-Pauker AG, 1-3-6-12-13	Simmeringer Hauptst. 38, Vienna 7	Aus
Smith Corp., A. O., Avanair & Prestan Equip. Div. 10	3533 N 27 St, Milwaukee 1	Wis
SOUTH TUBE CORP. 3-8-12-15-16, Adv Pg 7	75 N Maple Ave, Ridgewood	NJ
Snyder Mfg. Co. Inc., 11	Box 464, New Philadelphia	Ohio
Societe Pirex-Pontoux, 2-12-16	360 Rue Saint-Honore, Paris 1	Fr
Sparta Mfg. Co. Div. US Ceramic Tile Co., 10	Dover	Ohio
Stackpole Carbon Co., 7	St. Marys	Pa
Standard-Thomson Corp., 1	152 Grove St, Waltham 54	Mass
Star Porcelain Co. 3	51 Maidenad Ave, Trenton	NJ
Stewart Mfg. Co., D. M. 3	E 30th St, Chattanooga 1	Tenn
Sulzer Bros. Ltd. 5-9-13	Winterthur	Switz
SUPERIOR TUBE CO. 3-5-8-9-12-13-14-15-16-17, Adv Pg 198	Box 797, Harrisburg	Pa
Swepco Tube Corp, 5-9-12-16	One Clifton Blvd, Clifton	NJ
Synthane Corp., 10	River Rd, Oaks	Pa
Talbot Steel Tube Co Ltd. 5-8-12-13-16	Green Ln, Walsall, Staffs	Eng
Taylor Fibre Co. 10	Norristown 40	Pa
Taylor Forge & Pipe Works, 2-6-12-16	Box 485, Chicago	Ill
Titanium Metals Corp of America, 15-16	233 Broadway, New York 7	NY
Torrance Brass Foundry, Inc., 1-6-16-17	1826 W 213th St, Torrance	Cal
Tosi, S.p.A., Pensos, 9-12-13	Legnano, Milan	Ital
Trent Tube Co. 1-6-12-16-18	East Troy	Wis
Tube Investments Ltd. 1-3-6-8-9-12-13-14-15-16-17	Astor Manor, Birmingham 6	Eng
Tube Methods, Inc. 5-8-12-13-16	Depot & Kossuth Sts, Bridgeport	Pa
Tube Reducing Corp. 5-12-13-14-15-17	609 Main Ave, Wallington	NJ
Union Steel Corp. 5-8-12-13-16	1600 Ashwood Terr, Union	NJ
U. S. PIPE & FOUNDRY CO. STEEL & TUBES DIV., 2-12-13, Adv. Pgs. 14, 15	E Pearl St, Burlington	NJ
U. S. STEEL CORP. 1-6-7-8-9-16, Adv. Pgs. 50, 51	525 Wm. Penn Pl, Pittsburgh 30	Pa
Vallourec, Sts. 5-6-8-12-13-16-16-17,	6 rue Daru, Paris 8e	Fr
WALLACE-MURRAY CHEMICAL CO. 11, Adv Pg 201	116 Broad St, New York 4	NY
Wade, Compting, Ltd., 16	270 High Rd, Ilford, Essex	Eng
WAH CHANG CORP. 9-16-17, Adv Pg 123	233 Broadway, New York 7	NY
Wall Tube & Metal Products Co., 8-10-12-13-16	Box 350, Newport	Tenn
Wallingford Steel Co. 5-8-12-16-17	89 Valley St, Wallingford	Conn
WESTINGHOUSE ELEC. CORP. MATERIALS DIV. 8, Adv. Pgs. 70, 71	Blairsville	Pa
Will Corp. 6-10-11	Box 1060, Rochester 3	NY

Wisconsin Centrifugal Foundry, Inc. 8-13	800 E St, Port Ann, Washington	Wn
Wolverine Tube Div. Calumet & Hecla, Inc. 1-6-8-9-16-17	17200 Southfield Rd. Allen Park	Mich

PIPE & TUBING—LINED
1. GLASS-LINED
2. PLASTIC-LINED
3. RUBBER-LINED

Borden Chemical Co. 3	360 Madison Ave, New York 17	NY
Dow Chemical Co. R	Midland	Mich
Dynamit Nobel AG Plastics Div. 2	Troisdorf Bez Koln, Germany	
Linerne Rubber Co., 3	Box 2191, Trenton 7	NJ
Pfaudler Co Div Pfaudler Permutit Inc 1-2	1000 West Ave, Rochester 3	NY
Resinoflex Corp. R	Woodland Rd, Rowland	NJ
Shamban & Co., W. S., 2	11617 Jefferson Blvd, Culver City	Cal
Shelton & Co. Inc., M. L., 1-2-3	360 Lexington Ave, New York 16	NY

PIPE FITTINGS & ACCESSORIES
See Also BELLOWS & EXPANSION JOINTS
FLANGES—PIPE
PIPE JOINTS—FLEXIBLE

Aeroquip Corp.	300 S East Ave, Jackson	Mich
Aeroquip-Marman Div.	11234 W Exposition Blvd, L A 64	Cal
Alloy Flange & Fitting Corp.	39-20 Review Ave, LIC 1	NY
Aluminum Co. of America	1501 Alcoa Bldg, Pittsburgh 19	Pa
Amercoat Corp.	4809 Firestone Blvd, South Gate	Cal
American Cast Iron Pipe Co.	Box 2603, Birmingham 2	Ala
AMERICAN SMELTING & REFINING CO., Adv Pg 67	120 Broadway, New York 5	NY
Atlas Tinnolite, Ltd.	Centre St, Welland, Ont.	Can
Babcock & Wilcox Co. Tubular Products Div.	Beaver Falls	Pa
Babcock & Wilcox Ltd.	209 Euston Rd, London NW 1, England	
Bergen Pipesupport Corp.	50 Church St, New York	NY
Bonney Forge & Tool Works	Cedar & Meadow Sts, Allentown	Pa
Caird Ltd., Francis	Africa House, Kingsway, London WC 2, Eng	
Cajon Machine Co.	902 E 149th St, Cleveland 10	Ohio
Chase Brass & Copper Co.	236 Grand St, Waterbury	Conn
Conley Co. Inc.	655 Myrtle Ave, Boston	NJ
Corning Glass Works, Shielding Radiation	Corning	NY
CRAWFORD FITTING CO. Adv Pg 53	884 E 140 St, Cleveland 10	Ohio
Crawford Fittings (Canada) Ltd.	406 Kent Ave, Niagara Falls, Ont, Can	
Decapipe & Fittings, Ltd.	56 Kingsway, London, WC2, England	
Dresser Co. Inc.	980 N Findlay St, Dayton 4	Ohio
FIP	Via E Cuoco 5, Sori Genova	Ital
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
FLOWLINE CORP. Adv Pg 169	New Castle	Pa
GRAY TOOL CO. Adv Pg 72	7135 Ardmore, Box 2291, Houston 1	Tex
Haveg Industries Inc.	900 Greenbank Rd, Wilmington 8	Del
Hymas Steiltite Co. Div. of UCC	570 Park Ave, New York 17	NY
Imperial-Eastman Corp.	6300 W Howard St, Chicago 48	Ill
Johns-Manville	22 E 40th St, New York 16	NY
Kocksrite Hydraulics Ltd.	Allesley, Coventry, Warwickshire, Eng	
Knapp-Construction Co., Andrew	23-15 Borden Ave, Long Island City 1	NY
Knapp Mills, Inc.	23-15 Borden Ave, LIC 1	NY
Ledish Co.	5401 E Packard Ave, Cudahy	Wis
Linerne Rubber Co.	Box 2191, Trenton 7	NJ
MIDWEST PIPING DIV. CRANE CO. Adv Pg 101	1430 S Second St. St. Louis 4	Mo
Moore & Co., Samuel	Main & Orchard Sts, Mentor	Ohio
NATIONAL ALFOLDI CO. DIV. OF UCC, Adv. Pgs. 96, 97	270 Park Ave, New York 17	NY
National Valve & Mfg. Co.	3131 Liberty Ave, Pittsburgh 1	Pa
Newman, Hender & Co. Ltd.	Wonersheme, Hemel, Gloucester, Eng	
Parker Aircraft Co	5857 W Century Blvd, Los Angeles 45	Cal
Pfaudler Co, Div, Pfaudler Permutit Inc.	1000 West Ave, Rochester 3	NY
PHOENIX-ROHRBOHNE AG, Adv Pg 27	August-Thyssen-Str 1, Duesseldorf	Ger
Pittsburgh Piping & Equipment Co.	158 40th St, Pittsburgh	Pa
Resinoflex Corp.	Woodland Rd, Rowland	NJ
Simmering-Graz-Pauker AG	Simmeringer Hauptr. 36, Vienna 7	Aus
Speedline Fittings Div Hunter T. Fore Co	Erie Ave. & D St, Philadelphia 24	Pa
Sulzer Bros. Ltd.	Winterthur	Swit
Swepco Tube Corp.	1 Clifton Blvd, Clifton	NJ
Talbot Steel Tube Co. Ltd.	Green Ln, Birkhill, Sheff, England	
Taylor Forge & Pipe Works	Box 465, Chicago	Ill
Tosi, S.p.A., Franco	Legnano, Milan	Ital
Tube Turns Div. Chemetron Corp.	224 E Broadway, Louisville 1	Ky
Tubela Engineering Co. Ltd.	Powter Rd, Hainault, Essex, England	
Unarmat Div. Sealey Holden, Ltd.	63-5 Broadwater Rd, Welwyn Garden City, Herts, Eng	
Vallourec, Sa	6 rue Daru, Paris 8e	Fr
Vogt Machine Co., Henry	1000 W Oremby St, Louisville	Ky
W-K-M Div. of ACF Industries	Box 2097, Houston	Tex
Wade, Couplings, Ltd.	270 High Rd, Ilford, Essex	Eng

PIPE JOINTS—FLEXIBLE
See Also BELLOWS & EXPANSION JOINTS

Aeroquip Corp.	300 S East Ave. Jackson	Mich
Aeroquip-Marman Div.	11234 W Exposition Blvd, L A 66	Cal
Caird Ltd., Francis	Africa House, Kingsway, London WC 2, Eng	
Cold-Reynolds Engineering Co.	1125 Main St, Stamford	Conn
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
Resinoflex Corp.	Woodland Rd, Rowland	NJ
Tosi, S.p.A., Franco	Legnano, Milan	Ital

PIPETTES

ATOMIC ACCESSORIES, INC., Adv Pg 206	811 W Merrick Rd. Valley Stream	NY
CENTRAL SCIENTIFIC CO. Adv Pg 113	1700 Irving Park Rd. Chicago 13	Ill
Corning Glass Works, Shielding Radiation	Corning	NY
Gallenkamp & Co. Ltd., A.	Sun St, London, E. C. 2, England	
GELMAN INSTRUMENT CO. Adv Pg 233	119-N, Chelsea	Mich
General Scientific Equipment Co.	Limekiln & Williams, Philadelphia 50	Pa
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	665 Merrick Rd. Lynbrook	NY
Scientific Glass Apparatus Co., Inc.	100 Lakewood Terr, Bloomfield	NJ
Will Corp.	Box 1060, Rochester 3	NY

PIPETTES—AUTOMATIC

Corning Glass Works, Shielding Radiation	Corning	NY
Gallenkamp & Co. Ltd., A.	Sun St, London, E. C. 2, England	
INSTRUMENTATION ASSOCIATES, INC., Adv Pg 230	17 W 60th St. New York 23	NY
Kahl Scientific Instrument Corp.	Box 1108, El Cajon	Cal
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	665 Merrick Rd. Lynbrook	NY
Sebaco Scientific Div. Sebaco & Co.	75 Cliff St. New York 38	NY
Scientific Glass Apparatus Co., Inc.	100 Lakewood Terr, Bloomfield	NJ
Will Corp.	Box 1060, Rochester 3	NY

PIPETTORS—REMOTE

ALLIED ENGINEERING & PRODUCTION CORP., Adv Pg 242	2421 Blending Ave. Alameda	Cal
AMERICAN NUCLEAR CORP. Adv Pg 198	Box 438, Oak Ridge	Tenn
ATOMIC ACCESSORIES, INC. Adv Pg 206	811 W Merrick Rd. Valley Stream	NY
Atomic Devel. & Machine Corp.	15-04 120 St, College Point 56	NY
Buchler & Co.	Frankfurter Str, 394 Braunschweig, Ger	
D. I. S. I. Nuclear Corp.	Via A. Boccioni 30, Milan	Ital
Ohio Nuclear Inc.	27105 Knickerbocker Rd. Cleve 40	Ohio
Picker X-Ray Corporation	2375 Mamaroneck Ave, White Plains	NY
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	665 Merrick Rd. Lynbrook	NY
Research Equipment Co.	668 Sunnyside, Wheaton	Ill
TRACERLAB, INC. Adv. Pgs. 124, 113-5	1601 Trapelo Rd. Waltham 54	Mass

PLANCHETS

Amsterdam-Remaine Corp	111 W Jewel Ave, St. Louis 33	Mo
ATOMIC ACCESSORIES, INC., Adv Pg 206	811 W Merrick Rd. Valley Stream	NY
Atomic Devel. & Machine Corp.	15-04 120 St, College Point 56	NY
D. I. S. I. Nuclear Corp.	Via A. Boccioni 30, Milan	Ital
Dr. Vinz KG	20 Baumbugweg, Bonn	Ger
NUCLEAR-CHICAGO CORP., Adv. Pgs. 54-57	340 E Howard Ave. Des Plaines	Ill
NUCLEAR MEASUREMENTS CORP., Adv Pg 237	2460 N Arlington Ave. Indpls. 18	Ind
NUCLEONIC CORP. OF AMERICA, Adv Pg 202	196 Wagner St. Brooklyn 31	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 187	Eindhoven	Neth
Picker X-Ray Corporation	2375 Mamaroneck Ave, White Plains	NY
Planchets	Box 286 Chelsea	Mich
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	665 Merrick Rd. Lynbrook	NY
TECHNICAL ASSOCIATES, Adv Pg 235	140 W Providencia Ave. Burbank	Cal
TRACERLAB, INC. Adv. Pgs. 124, 113-5	1601 Trapelo Rd. Waltham 54	Mass

PLANT-SITE LOCATION
See SERV. & CONS'LT: SITE LOCATION

PLANTS & FACILITIES—NUCLEAR
See POWER PLANTS—NUCLEAR

PLASTICS
See Also CONTAINERS—PLASTIC
PIPE & TUBING

ALLIED ENGINEERING & PRODUCTION CORP., Adv Pg 242	2421 Blending Ave. Alameda	Cal
Allied Plastics Supply Corp.	75 Cliff St. New York 38	NY
Allied Resinous Products, Inc.	Whitney Rd. & Cloth St, Conneaut	Ohio
American Products Mfg. Co. Inc.	8127-33 Cleander St. New Orleans 18	La
Atkins & Merrill, Inc.	Post Rd. South Sudbury	Mass
Continental-Diamond Fiber Corp.	Newark	Del
DEFENSE APPAREL, Adv Pg 238	715 Allyn St. Hartford 3	Conn
du Pont de Nemours & Co. Inc., E. I.	Wilmington 98	Del
Dynamit Nobel AG Plastics Div.	Troisdorf Bez Koln, Germany	
Gerlach Electronic Products	Camden 1	NJ
General Electric Co. Laminated Prod. Dept.	Coshocton	Ohio
Haveg Industries, Inc.	900 Greenbank Rd. Wilmington 8	Del
Hooker Chemical Corp.	Niagara Falls	NY
Knapp Construction Co., Andrew	23-15 Borden Ave, Long Island City 1	NY
Knapp Mills, Inc.	23-15 Borden Ave, LIC 1	NY
Kuhlmann, Ets.	25 bd de l'Amiral-Bruix, Paris 16e	Fr
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
Luterne Rubber Co.	Box 2191, Trenton 7	NJ
Mason, Shover & Shenden, Inc.	Box 551, Irvin	Pa
Mica Insulator Div. MMM	799 Broadway, Schenectady 1	NY
Monsanto Chemicals Ltd.	10/18 Victoria St, London SW1	Eng
National Vulcanized Fiber Co	Maryland Ave & Beech St, Wilmington 99	Del
Pamelyn Div. St. Regis Paper Co.	Enterprise Ave. Trenton	NJ
PROHINEY, Adv Pg 199	23 Rue Boileau, Paris, France	Fr
Penn Fibre & Specialty Co.	2000 E Westmoreland St, Philadelphia 34	Pa
Pittsburgh Plate Glass Co.	2200 Fort Duquesne Blvd, Pittsburgh 22	Pa
Plastimayd Corp.	2246 SE 7th Ave, Portland 14	Ore
Polycast Corp.	86 Southfield Ave, Stamford	Conn
Polymer Corp.	2120 Fairmount Ave, Reading	Pa
Polyponco Ltd.	Tovain Rd, Wolwyn Garden City, Herts	Eng
Radiation Applications, Inc.	23-40 37th St, Long Island City 1	NY
Resinoflex Corp.	Woodland Rd, Rowland	NJ
Semi-Elements Inc.	Saxonburg Blvd, Saxonburg	Pa
Shamban & Co., W. S.	11617 W Jefferson Blvd, Culver City	Cal
SHOWA DENKO K. K., Adv Pg 113-G	34 Soho Miyamoto-cho, Minato-ku, Tokyo	Jap
Stauffer Chemical Co.	380 Madison Ave, New York 17	NY
Synthane Corp.	River Rd, Tabs	Pa
Taylor Fibre Co.	Norristown 40	Pa
Telecomputing Corp.	8125 Aero Dr, San Diego 11	Cal
Thompson Fibre Glass Co., R. L.	1338 Cordova St, Los Angeles 7	Cal
Union Carbide Plastics Co. Div. UCC	270 Park Ave, New York 17	NY
WESTLAKE PLASTICS CO. Adv Pg 230	Box 16, Lenni Mills	Pa

PLASTICS—IRRADIATED

Allied Plastics Supply Corp.	75 Cliff St. New York 38	NY
AMERICAN NUCLEAR CORP. Adv Pg 198	Box 438, Oak Ridge	Tenn
Radiation Applications, Inc.	23-40 37th St, Long Island City 1	NY
Radiation Dynamics Inc.	Westbury Industrial Pk. Westbury	NY
SHOWA DENKO K. K., Adv Pg 113-G	34 Soho Miyamoto-cho, Minato-ku, Tokyo	Jap

PLUGGING INDICATOR—SODIUM

Atomics International Div. NAA Inc.	Box 309, Canoga Park	Cal
Liquid Metals, Inc.	Box 2088, Wrentham	Mass

PLUGS—CHANNEL, SELF-LOCKING

Electricite Mem Sin d'	11 rue Petit, Clichy Seine	Fr
Flight Refueling Ltd.	Tarnam Rushden Anfld. Blandford, Dorset	Eng
STAMAT MFG. CO., INC. Adv Pg 119	511 Benson Dr. Westbury	NY

PLUTONIUM
See METALS, ALLOYS & COMPOUNDS

PNEUMATIC MECHANISMS

ALLIED ENGINEERING & PRODUCTION CORP., Adv Pg 242	2421 Blending Ave. Alameda	Cal
BAILEY METER CO. Adv Pg 69	29801 Euclid Ave. Wickliffe	Ohio
Baldwin Industrial Controls	Dartford, Kent	Eng
Bristol Co.	Box 1790 BBG, Waterbury 20	Conn
Chartrilles Engrg. Wks. Ltd.	100 Rte de Lyon, Geneva	Switz
De Vilbiss Co.	300 Phillips Ave. Toledo 1	Ohio
Eckardt AG, J. C.	Pragar, 72/81, Stuttgart-bad Cannstatt	Ger
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
Garrett Corp.	9851 Sepulveda Blvd. Los Angeles 45	Cal
Johnson Service Co.	Milwaukee 1	Wis
Kahlenberg Bros. Co.	12th & Monroe Sts, Two Rivers	Wis
Parker Aircraft Co	5857 W Century Blvd, Los Angeles 45	Cal
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	665 Merrick Rd. Lynbrook	NY
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	33 Bd G. Clemenceau, Courbevoie, Seine	Fr
Telecomputing Corp.	8125 Aero Dr, San Diego 11	Cal
Vacuum Research (Cambridge) Ltd.	Quayside, Bridge St, Cambridge	Eng
Vogue Instrument Corp.	2550 Linden Blvd, Brooklyn 8	NY

PNEUMATIC SAMPLE—IRRADIATION TRANSFER SYSTEMS

Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Atomatic Systems Corp.	661 Market St, Saddle Brook	NJ
BELGONUCLEAIRE, Adv Pg 113-L	35 rue des Colonies, Brussels 1	Belg
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	665 Merrick Rd. Lynbrook	NY
REACTOR EXPERIMENTS, INC. Adv Pg 26	148 Harbor Blvd. Belmont	Cal
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	33 Bd G. Clemenceau, Courbevoie, Seine	Fr

POCKET DOSIMETERS
See DOSIMETERS—RADIATION

POTASSIUM
See METALS, ALLOYS & COMPOUNDS

POTENTIOMETERS & RHEOSTATS

A. E. I. Ltd.	30 Grosvenor Pl, London SW1, Eng	
Ace Electronics Associates, Inc.	99 Dover St, Somerville 44	Mass
Allen-Bradley Co.	136 W Greenfield Ave, Milwaukee 4	Wis
Alsthom, Nucleaire Div.	38, Ave. Kleber, Paris 16, France	
BARNES ELECTRONIC CORP., Adv Pg 85	230 Duffy Ave. Hicksville	NY

Armstrong Wirework Equipment	Hucclecote, Gloucester	Eng
Bourns, Inc. Trimpot Div.	6135 Magnolia Ave, Riverside	Cal
Bristol Co.	Box 1790 MRG, Waterbury 90	Conn
Computer Instruments Corp.	92 Madison Ave, Hempstead	NY
Cutler-Hammer, Inc.	432 N 12th St, Milwaukee 1	Wis
Engelhard Industries, Inc.	113 Astor St, Newark 5	NJ
Fairchild Controls Corp.	225 Park Ave, Hicksville	NY
Fluke Mfg. Co. Inc., John	Box 7428, Seattle	Wash
General Controls Co.	801 Allen Ave, Glendale 1	Cal
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
General Radio Co.	West Concord	Mass
Goldsmith Controls Inc.	Hicksville	NY
Helipot Div. of Beckman Instruments, Inc.	2500 Harbor Blvd, Fullerton	Cal
Leeds & Northrup Ltd.	Broad St, Birmingham 19	Eng
Link Div. - Gen. Precision, Inc.	Binghamton	NY
Litton Industries	336 N Foothill Rd, Beverly Hills	Cal
Markite Corp.	155 Waverly Pl, New York 14	NY
Model Rectifier Corp.	1675 Utica Ave, Brooklyn 36	NY
Obrite Mfg. Co.	2001 Howard St, Skokie	Ill
Perkin-Elmer Corp.	Norwalk	Conn
Raytheon Co. Industrial Components Div.	56 Chapel St, Newton	Mass
Rex Rubber Corp.	135 Saw Mill River Rd, Yonkers	NY
Spectrol Electronics Corp.	1704 S Del Mar Ave, San Gabriel	Cal
Sorensen & Mills, Inc.	511 Lewis St, Dallas 7	Tex
Technology Instrument Corp	631 Main St, Acton	Mass
U. S. Controls, Inc	410 Fourth Ave, Brooklyn 15	NY
Vogue Instrument Corp.	2000 Linden Blvd, Brooklyn 8	NY
Wesson Manufacturing, Inc.	Boston Post Rd, Wayland	Mass
WELCH SCIENTIFIC CO. Adv Pg 193	1515 Sedgwick St, Chicago 10	Ill

POWDER-METALLURGICAL EQUIPMENT
See Under FABRICATING EQUIPMENT
FURNACES—SINTERING
METALLOGRAPHIC EQUIPMENT
VIBRATORY POWDER-COMPACTION EQUIPMENT

POWER PLANT COMPONENTS
See CONDENSERS—POWER-PLANT
CONTROL EQUIPMENT—POWER-PLANT
COOLING TOWERS
DEAERATORS
DEMINERALIZERS
FANS & BLOWERS
HEAT EXCHANGERS
HEATERS—FEEDWATER
ION-EXCHANGE EQUIPMENT
POWER PLANTS—NUCLEAR
REACTORS—NUCLEAR
RECOMBINERS—HYDROGEN & OXYGEN
STEAM GENERATORS—POWER-PLANT
SUPERHEATERS—POWER-PLANT
TRAPS
TURBINES
VALVES
WATER CONDITIONERS

POWER PLANTS—NUCLEAR
See Also REACTORS
1. DESIGN
2. CONSTRUCTION

AEG, 1-2, Adv Pg 173-A	Hochstrasse, Frankfurt/Main, Germany	
AMF ATOMICS, 1, Adv. Pgs. 74, 77, 99	140 Greenwich Ave, Greenwich	Conn
Advanced Technology Labs. 1-5	1828 Wilcoxon Rd, Mountain View	Cal
Aerojet-General Nucleonics, 1-6	Box 77, San Ramon	Cal
Aerojet Div Aerojet-General Corp. 1	420 N Citrus Ave, Covina	Cal
Alco Products, Inc. 1-5	Box 1005, Schenectady 5	NY
ALLIS-CHALMERS MFG. CO. 1-2, Adv. Pgs. 109-111	920 S 70th St, Milwaukee	Wis
Alsthom, Nuclear Div, 1-5	38, Ave. Kleber, Paris 16, France	
Associates Nucleonics Inc. 1-6	975 Stewart Ave, Garden City	NY
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, 1-2, Adv Pg 112-G	Charleroi	Belg
Atomics International Div. NAA, 1-2	Box 309, Canoga Park	Cal
BABCOCK & WILCOX CO. 1-2, Adv. Pgs. 34, 35	161 E 42 St, New York 17	NY
Babcock & Wilcox Ltd, 1-2	209 Euston Rd, London NW 1, England	
Baldwin-Lima-Hamilton Corp. 1-2	Dept N 9, Philadelphia 42	Pa
Barnet Corp. 1-5	1207 Bush St, San Francisco 9	Cal
BELGONUCLEAIRE, 1-2, Adv Pg 113-L	35 rue des Colonies, Brussels 1	Belg
Bertin & Bee, Inc. 1-2	100 W Broadway, New York 13	NY
Caird Ltd., Francis, 2	Africa House, Kingsway, London WC 2	Eng
Canadian-General Electric Co Ltd., 1-6	107 Park St, Peterborough, Ont	Can
Catalytic Construction Co. 1-2	1500 Walnut St, Philadelphia 2	Pa
Chiyoda Chemical Eng & Const Co Ltd 2	1-30, Shiba-Shirobashi, Minato-Ku, Tokyo, Japan	
Combustion Engineering, Inc. 1-2	200 Madison Ave, New York 16	NY
Condenser Service & Engrg. Co, Inc. 2	150 Observer Hwy, Hoboken	NJ
Consolidated Vacuum Corp. Div. U. S. Steel Corp. 1-2	Box 3015, Tenn. Ann. L A 56	Cal
Dravo Corp. 1-2	Dravo Bldg, Pittsburgh 22	Pa
Elsaco Services Inc. 1-5	5 Sector St, New York 6	NY
Electric Boat Div. Gen. Dynamics Corp. 1-2	Industrial Services Dept. 600, Groton	Conn
Fairbanks Co., The, 2	393 Lafayette St, New York 3	NY
Ferguson Co., H. K., 2	1750 E 11th St, at Walnut, Cleve, 14	Ohio
Fuji Electric Mfg. Co. Ltd, 1-2	2-6 Marunouchi, Chiyoda-ku, Tokyo	Jap
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. 1-2, Adv Pg 202	Box 608, San Diego 12	Cal
GENERAL ELECTRIC CO. APPARATUS SALES, 1-2, Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
General Electric Co Ltd of England, 1-2	Erith, Kent, England	
General Nuclear Engineering Corp. 1	Box 548, Dunedin	Fla
Gilbert Associates, Inc. 1-2	1005 Lancaster Ave, Reading	Pa
Gutehoffnungshütte Sterkrade AG, 2	Lipperfeld 1, Oberhausen Rhld.	Ger
Heat-X, Inc. 2	Brewster	NY
Hitachi, Ltd. 1-2	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
Hujco Div. Hoffman Dalvanity-Industial, 2	Box 691, Pasco	Wash
INDATOM, 1-2, Adv Pg 112-G	48 rue la Boetie, Paris 8e	Fr
Lockheed Aircraft Corp. Georgia Div. 1	1500 Northside Dr. NW, Atlanta 18	Ga
Maas, Inc., Chas. T., 1	80 Federal St, Boston 10	Mass
Marquardt Corp. 1	16555 Saticoy St, Van Nuys	Cal
MARTIN CO. NUCLEAR DIV. 1-2, Adv Pg 5	Baltimore 3	Md
Mason Construction Co. Inc, 2	2600 Far Hills Ave, Dayton 19	Ohio
MIDWEST PIPING DIV. CRANE CO. 2, Adv Pg 103	1450 S Second St, St. Louis 4	Mo
NERATOM, N. V., 2, Adv Pg 112-F	Noordeinde 30, The Hague	Neth
Nuclear Power Group, 1-6	Knutsford, Cheshire	Eng
Nuclear Technology Corp, 1	55 Church St, White Plains	NY
Pittsburgh Piping & Equipment Co. 2	150 40th St, Pittsburgh	Pa
Pritchard & Co., J. F. 1-2	0805 Bonneville Pkwy, Kansas City	Mo
Sanderson & Porter, 1-2	72 Wall St, New York 5	NY
Sargent & Lundy, 1	140 S Dearborn St, Chicago 3	Ill
Schoenfeld, David M. 1	New Canaan	Conn
Siemens Schuckertwerke AG, 1-2	Werner-von-Siemens Str. 50, Erlangen	Ger
SOCIETE RATEAU, 1-2, Adv Pg 112-T	Rue Rateau La Courneuve, Seine	Fr
STEARNS-ROGER MFG. CO. 1-2, Adv Pg 22	Box 5888, Denver 17	Colo
Stone & Webster Engineering Corp. 1-2	49 Federal St, Boston 7	Mass
Sulzer Bros. Ltd. 1	Winterthur	Switz
Thompson, Ltd., John, 1-2	Wolverhampton	Eng
TOKYO SHIBAURA ELECTRIC CO. LTD. 2, Adv Pg 225	12 Yanaka-cho 1-Chome, Chiyoda-ku, Tokyo	Jap
UNITED NUCLEAR CORP. 1, Adv Pg 26	563 Winchester Ave, New Haven 4	Conn
Vitro Corp. of America, 1	257 Madison Ave, New York 16	NY
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT. 1, Adv. Pgs. 70, 71	Box 355, Pittsburgh 30	

POWER SUPPLIES
See Also BATTERIES—NUCLEAR
1. CURRENT, REGULATED
2. HIGH-VOLTAGE (>100v)
3. HIGH-VOLTAGE (1-100v)
4. HIGH-VOLTAGE, REGULATED
5. LOW-VOLTAGE (10-1,000 VOLTS)

AEG, 1-2-3-4-5, Adv Pg 112-A	Hochstrasse, Frankfurt/Main, Germany	
A.E.I. Ltd. 2-5	30 Grosvenor Pl, London SW1, Eng	
Acme Electric Corp. 1-2-4-5	31 Water St, Cuba	NY
Alsthom, Nuclear Div, 1-2-3-4-5	38, Ave. Kleber, Paris 16, France	
American Electronic Labs. 1-5	Colmar	Pa
AMP Inc. 2-3-4-5	Hanoover Blvd, Harrisburg	Pa
Amplifier Corp. of America, 5	350 Broadway, New York 13	NY
Applied Research (Instruments) Ltd. 1-2-3-4	Enterprise House, Reigate	Eng
Associated Research, Inc. 2-3-4	3855 W Belmont Ave, Chicago 18	Ill
Associated Specialties Co. 4	1701 Main St, Canfield	Pa
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, 2-3-4-5, Adv Pg 112-G	Charleroi	Belg
Atlantic-Service Corp, 4	111 W Jewel Ave, St. Louis 24	Mo
Automation, Inc. Div C W Bond Co Inc. 2	6050 S Hoover, Los Angeles 44	Cal
Awsley Electric, Ltd. 4-5	5 Ockendon, Essex	Eng
BAIRD-ATOMIC INC. 4, Adv Pg 87	33 University Rd, Cambridge 38	Mass
Berkley & Donner Labs. Inc. 4-5	30 Frankfort St, Plattsburg	Mass
Beckle Erickson U.K. Ltd. 2-4-5	High Church St, New Romford, Nott.	Eng
Burr-Brown Res. Corp. 1	Box 6666, Tucson	Ariz
CARAD CORP. Adv Pg 224	3381 Jacques Sims Blvd, Palo Alto	Cal
Cavinell Research & Electronics Ltd, 5	Scotts Rd, Southall, Middlex, Eng	
COMPONENTS CORP. NUCLEAR INSTRUMENT DIV. 1-2-4-5, Adv Pg 102	706 Main St, Danville	NJ
Computer Systems Inc. 5	Colonial Rd, Monmouth Junction	NJ
Cornell-Dubilier Electronics Div. Fed. Pac. Elec. Co. 1-5	50 Paris St, Newark 1	NJ
COSMIC RADIATION LABS., INC. 3-4, Adv Pg 3rd Cover	1540 Hamilton Hwy, Bellport	NY
Cosmic Technological Corp. 1-2	1028 Connecticut Ave, Washington 6	DC
D.I.S.I. Nuclear Corp. 1-2-3-4	Via A. Boccioni 30, Milan	Ital
Dynex Co. 1	600 W Mt. Pleasant Ave, Livingston	NJ
DEL ELECTRONICS CORP., 1-2-3-4-5, Adv Pg 39	521 Homestead Ave, Mt. Vernon	NY
Delcron, Inc. 1-2-3-4-5	6th & Cambria Sts, Philadelphia 33	Pa
Digital Equipment Corp. 1-5	Maynard	Mass
Dressen-Barnes Electronics Corp. 5	250 N Vinedo Ave, Pasadena 8	Cal
Dynage Inc. 5	200 Capitol Ave, Hartford	Conn
EDGERTON, GERMESHAUSEN & GRIER, INC. 3-5, Adv Pg 105	160 Brookline Ave, Boston 15	Mass
Elcor, Inc. 1-5	1205 W Broad St, Falls Church	Va
Electro Engineering Works, 2-3	401 Prado St, San Leandro	Cal
Electro-Physics Co. 5	207-1 Broadway, New York 7	NY
Electronic Measurements Co. Inc. 1-5	Lewis St. & Maple Ave, Kenilworth	NJ
Equipment Atomicos Brasileiro Ltda. 2-4	Rua 15104, Rio de Janeiro	Braz
Erie Resistor Corp. 5	644 W 12th St, Erie	Pa
Fansteel Metallurgical Corp. 1-5	North Chicago	Ill
Farnell Instruments, Ltd. 5	Light Industrial Estate, York Rd, Wetherby	Eng
Fluke Mfg. Co. Inc., John, 1-2-3-4-5	Box 7428, Seattle	Wash
Foster Transformer Ltd, 1-2-3-4-5	5 Wimbledon Manion Rd, London, SW19	Eng
FRANKLIN SYSTEMS, INC. 4-5, Adv Pg 236	2724 Hillsboro Rd. W Palm Beach	Fla
Freed Transformer Co., Inc. 5	1718 Weirfield St, Brooklyn 27	NY
General Dynamics/Electronics, 4-5	100 Carlson Rd, Rochester 5	NY
GENERAL ELECTRIC CO. APPARATUS SALES, 1-2-3-4-5, Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
General Nuclear Corp. 1-2-3-4-5	2203 S Cypress Ave, Fullerton	Cal
General Nuclear Corp. 1-5	500-4 4th Ave, New York 36	NY
General Radio Co. 5	West Concord	Mass
General Thermoelectric Corp. 5	Princeton	NJ
Gonal Transformer, Inc. 1-5	Manton & South Tree Sts. Grand Haven	Mich
Gyra Electronics Corp, 1-2-3-4	Box 186, LaGrange	Ill
HAMMER ELECTRONICS CO. 2-5, Adv Pg 212	Box 1321, Princeton	NJ
Harvey Electronics Ltd. 5	270 Pantbourgh Rd, Pantbourg, Hants	Eng
HARVEY-HELLS NUCLEAR CORP. 1-2, Adv Pg 201	43 Kendall St, Framingham	Mass
Heath Co. 4-5	Benton Harbor	Mich
Hermetic Seal Transformer Co. Div. Dresser Ind. Inc. 1-2-3-4-5	868 N 4th St, Garland	Tex
Heavy-Duty Electric Co. Div. Essco Products Corp. 1	204 Hart St, Watertown	Wis
Hewlett-Packard Co. 5	1501 Page Mill Rd, Palo Alto	Cal
HIGH VOLTAGE ENGINEERING CORP. 2, Adv Pg 179	5 Bedford St, Burlington	Mass
HORIBA INSTRUMENTS, INC. 2, Adv Pg 207	Nishikasai-Kaido Senju, Nakaku, Kyoto	Jap
Hughes Semiconductor Div. 2-4-5	600 Superior Ave, Newport Beach	Cal
Hydro Aire Co. Div. Crane Co. 2-3-5	3000 Winona Ave, Burbank	Cal
INTERTECHNIQUE S.A. 4-5, Adv Pg 112-H	81 rue Rondelet, Boulogne/Billancourt, Seine	Fr
ISOTOPE DEVELOPMENTS LTD. 4, Adv Pg 24	Bath Rd, Beenham, Reading, Berks	Eng
Ital Electronics S.p.A. 2-4-5	Via Ignazio Pettinengo 72, Rome	Ital
Jack Corp.	120 Spring St, Lexington	Mass
JOHNSON & ASSOCIATES, INC. WILLIAM R. 3, Adv Pg 226	Box 415, Mountain Lakes	NJ
Joy Mfg. Co. Industial Div. 5	H. W. Oliver Bldg, Pittsburgh 22	Pa
KAMAN NUCLEAR, 2, Adv. Pgs. 190, 191	Garden of the Gods Rd. Colo Springs	Colo
KEARFOTT DIV. GEN. PRECISION, INC. Adv Pg 221	1150 DeBoide Ave, Little Falls	NJ
KEITHLEY INSTRUMENTS, INC. 4-5, Adv Pg 194	12415 Euclid Ave, Cleveland 6	Ohio
Keith Ltd., George, 1	6 Lemmil Rd, Don Mills	Ont
KEPCO INC. 1-2-3-4-5, Adv Pg 68	131-38 Sanford Ave, Flushing 55	NY
Kidde & Co. Inc., Walter, 1-2-3-4	577 Main St, Belleville 9	NJ
Kilovolt Corp. 2-3-4	230 High St, Hackensack	NJ
Kin Tel. Div Cohu Electronics Inc., 1-5	5725 Kearny Villa Rd, San Diego 11	Cal
Kohe Kogyo Corp. 4-5	1-8 Wadayama-Dori, Hyogo-ku, Kobe	Jap
Kruhn-Hite Corp, 1-6	680 Mass. Ave, Cambridge 39	Mass
Kuphan Mfg. Div. Solomon Tool & Prod. Inc. 5	806 State St, Binghamton	NY
Lab. Prof. Dr. R. Berthold, 4	32 Calmbacherstr, Wildbad im Schwarzwald	Ger
Lambda Electronics Corp. 1-5	515 Broad Hollow Rd, Huntington	NY
Leach Corp. 1-2-4-5	18435 Susana Rd, Compton	Cal
Lodex, Inc. 5	120 Webster, Dayton 5	Ohio
Leeds & Northrup Co. 5	4901 Stenton Ave, Phila 44	Pa
L'Electronique Appliquee, 1-2-3-4-5	25 rue du Docteur Finlay, Paris 15, Fr	
Librascope Div. Gen. Precision, Inc. 1-5	Glendale 1	Cal
Litton Industries, 5	336 N Foothill Rd, Beverly Hills	Cal
Lockheed Aircraft Corp. 1-2-3-4-5	Box 551 Burbank	Cal
M. Tex Bench, Inc.	80 Wheeler Ave, Hicksville	NY
Magnetron, Inc. 2-5	560 Schuyler Ave, Kearny	NJ
Magnum Laboratories, Inc. 1-2-3-4-5	275 Fairfield Ave, Stamford	Conn
Marquardt Corp. 1-2-3-4-5	16555 Saticoy St, Van Nuys	Cal
Marconi of Cambridge Electronics Ltd. 5	The Aerodrome, Cambridge	Eng
Mid-Lantan Electronics, Inc. 1-4-5	20 Commerce St, Springfield	NJ
Milnes, Inc. 2-4	7020 S W Macadam Ave, Portland 19	Ore
Miles Hivolt Ltd, 1-2-3-4	Old Shoreham Rd, Hassocks-in-Sussex	Eng
Model Rectifier Corp. 5	1675 Utica Ave, Brooklyn 36	NY
Mountain Inc. Sub. Model Eng. & Mfg. Co. 1-5	4675 S State St, Salt Lake City	Utah
N.A.A., 1-2-3-4-5, Adv Pg 38	Box 752, State College	Pa
NERATOM, N. V., 2-3-4-5, Adv Pg 112-F	Noordeinde 30, The Hague	Neth
Network Industries Inc. 1-4-5	Box 397, Bayonne	NJ
Neutronic Associates Inc, 2-3-4	32 Tennyson Ave, Hempstead	NY
Newport Instruments (Scientific & Medical) Ltd. 1	Crawley Rd, Newport Pagnell, Bucks, Eng	
North Hills Electronics, Inc., 1-4	Alexander Pl, Glen Cove	NY
NUCLEAR-CHICAGO CORP. 3-4, Adv. Pgs. 56-57	345 E Howard Ave, Des Plaines	Ill
Nuclear-Electronics Corp. 3-4	2035 N Broad St, Philadelphia 32	Pa
Nuclear Enterprises (GB) Ltd, 2-4-5	Sighthill, Edinburgh 11	Scot
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), 1-2, Adv. Pgs. 217, 219, 221	1000 Vanore St, Apollo	Pa
Nuclear Research Applications Ltd. 4	Bell St, Reigate (Surrey)	Eng
NUCLEONIC CORP. OF AMERICA, 1-4, Adv Pg 192	196 Dupont St, Brooklyn 21	NY
Oerlikon Engineering Co, 1-2-3-4-5	Zurich 50, Switzerland	
Paschal Electronics, Inc., 2-3-4-5	Rt. 216, Towaco	NY
Philbrick Researches Inc., George A., 5	127 Clarendon St, Boston 16	Mass
Philco Corp. Govt. & Ind. Gr. 1-2-3-4-5	4700 Wissahickon Ave, Phila 44	Pa
Philips Electronic Instruments, 3-4	750 S Fulton Ave, Mt. Vernon	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. 2-4-5, Adv Pg 107	Eindhoven	Neth
Pioneer X-Ray Corporation, 3-5	1278 Mamaroneck Ave, White Plains	NY
Planetronics Inc. 1-2-3-4-5	Centre & Glendale Sts, Exeter	Pa
Pioneer Nucleonics Ltd. 3-5	Wyndon Rd, Hockingport	Eng

Precision Apparatus Co. Inc. 5	70-31 84th St, Glendale 27	NY
RADIATION COUNTER LABS, INC. 3-4,		
Adv. Pgs. 82, 83	5123 W Grove St. Skokie	Ill
Radiation Dynamics Inc. 2	Westbury Industrial Pk. Westbury	NY
RADIATION EQUIP. & ACCESSORIES CORP. 3-4,		
Adv. Pg. 3rd Cover	465 Merrick Rd. Lynbrook	NY
Radiation Instruments Co. 3-4	Box 735, Silver Spring	Md
RADIATION INSTRUMENT DEVELOPMENT LAB. 3-4,		
Adv. Pgs. 216, 230A-D	41 E North Ave. Northlake	Ill
RADIATION TECHNOLOGY, INC. 3-4-5,		
Adv. Pg. 3rd Cover	457 Antone St. NW, Atlanta 18	Ga
Radio Corp. of America Industrial Electronic Prods, 1-2-3-4,	Front & Cooper Sts, Camden 2	NJ
Raytheon Co. Voltage Regulator & Power Supply Dept. 1-2-3-4-5	Hooker Ave. South Norwalk	Conn
Research Specialties Co., 5	200 S Garvard Blvd, Richmond	Cal
Rhône Delpechin, 5	25 rue Pasteur, Montrouge, Seine	Fr
Rochester Instrument Systems Inc. 3-4-5	275 N Union St, Rochester 8	NY
S.A.L.P., 1-2-3-4-5	38, Rue Gabriel Crie, Malakoff, Seine	Fr
S.A.R.E.S. 3-4, Adv Pg 226	27 rue Jean Moro, Grenoble, Isere	Fr
S.T.A.E.R. 5	Via Ugo Bassi, 48, Rome	Ital
Sangamo Electric Co. 1-2-3-4-5	13 & Cayenne Sts, Springfield	Ill
Scott, Inc., II, 3, 1-5	111 Powder Mill Rd, Maynard	Mass
SELO, 3-4-5	Via Tendonia 87, Milan	Ital
Servo Nuclear Corp. 5	59-21 Astoria Blvd, Long Island City	NY
Siemens-Reiniger-Werke AG, 3-4-5	Leipziger, 45, Erlangen	Ger
Smith-Florence, Inc. 3-4-5	Overlake Ind. Pk. Box 717, Redmond	Wash
Solartron Electronic Group Ltd. 1-5	Victoria Rd, Farnborough, Hants	Eng
Southern Units Anytron Co. 1-2-3-4-5	Hallowell Ave, South Norwalk	Conn
Spectromagnetic Industries, 1-2-4-5	Box 5005, Hayward	Cal
SPELLMAN HIGH VOLTAGE CO. INC. 1-2-3-4		
Adv Pg 12	1920 Adee Ave. Bronx 69	NY
Stanford Tel. & Cables Ltd. 1-2-3-4-5	99 Glasshouse Yd, London EC 1	Eng
Summers & Mills, Inc. 3-4	511 Lover St, Dallas 7	Tex
Superior Electric Co., The, 5	383 Middle St, Bristol	Conn
Sylvania Elec Prods Inc. Special Prods Operation, 1-2-3-4-5	60 Boston St. Salem	Mass
SYSTEMS ENGINEERING LAB. INC. 3-5,		
Adv Pg 190	Box 9140, Fort Lauderdale	Fla
TRG, Inc, 1-4	5 Aerial Way, Syosset	NY
Tracer Div. Thompson Ramo Wooldridge Inc. 1	13555 Euclid Ave. Cleveland 17	Ohio
TECHNICAL ASSOCIATES, 3-4-5,		
Adv Pg 226	140 W Providencia Ave. Burbank	Cal
TECHNICAL MEASUREMENT CORP. 4,		
Adv Pg 43	441 Washington Ave. North Haven	Conn
Telemetrix, Inc. 5	Box 500, Beaverton	Ore
Telechrome Mfg. Corp. 1-2-3-4-5	185 Dixon Ave. Amityville	NY
Tenelec Instrument Co. 5	Box 984, Oak Ridge	Tenn
TERMINAL RADIO INTERNATIONAL LTD. 1-2-3-4-5,		
Adv Pg 113-C	240 W 17th St. New York 11	NY
Torsion Electronics, Inc. 5	Box 70, Lakewood	NJ
TRACERLAB, INC. 4, Adv. Pgs. 134, 113-5	1601 Trapelo Rd. Waltham 54	Mass
Trak Electronics Co. Inc. 5	Wilton	Conn
Transistor Devices, Inc. 1-5	60 Factory St. Cedar Grove	NJ
Trott Electronics, Inc. 3-4-5	412 Smith St. Rochester 8	NY
Ultron Co., II, V, 1-2-3-4-5	2941 San Luis Rey Rd. Oceanside	Cal
Universal Transistor Products Corp. 3-4-5	300 Oak St. Copiague	NY
Valor Instruments, Inc. 1-5	13034 Crenshaw Blvd. Gardena	Cal
Vann Inc. 1-2-3-4-5	2001 Walnut St. Garland	Tex
Vickers, Inc. Electric Products Div. 1-2-3-4-5	1815 Locust St. St. Louis 3	Mo
VICTOREEN INSTRUMENT CO. 3-4-5,		
Adv. Pg. 4th Cover	5806-11 Hough Ave. Cleveland 3	Ohio
Vulkanic Co. 1	18660 W 8 Mile Rd. Southfield	Mich

PREAMPLIFIERS

ADG, Adv Pg 113-A	Nordstrasse, Frankfurt/Main, Germany	
Acoustag, Inc.	22212 Telegraph Rd. Detroit	Mich
Aspen Electronics Inc. Semiconds Div.	Ft. Lauderdale	Fla
American Electronic Labs.	Colmar	Pa
Amplifier Corp. of America	398 Broadway, New York 13	NY
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,		
Adv Pg 112-D	Charleroi	Belg
Astrometer-Sonicom Corp	111 W Jewel Ave, St. Louis 22	Mo
Avionics, Inc. Div. C. W. Reed Co Inc.	3400 S Hoover, Los Angeles 64	Cal
Avionics Corp.	340 Main St. Waltham	Mass
Awsley Electric, Ltd.	5 Ockendon, Essex	Eng
BARRS-ATOMIC INC. Adv Pg 87	33 University Rd. Cambridge 38	Mass
Berkley & Dexter Labs. Inc.	50 Frankfort St. Fitchburg	Mass
Bell Telephone Mfg. Co.	20 Boulevards, Hoboken/Antwerp	Belg
Beckman Corp-Beckman Pacific Div.	11800 Sherman Way, N Hollywood	Cal
Beckman Elcomat U.K. Ltd.	High Church St, New Bedford, Beds	Eng
Brüel & Kjaer	Lindo Alle 33, Naerum, Den	
Brush Instruments Div. Clevite Corp.	37th & Perkins, Cleveland 14	Ohio
Bun-Kowa Ko. Corp.	Box 6462, Tucson	Ariz
Chesapeake Instrument Corp.	Shadyside	Md
CERMIC RADIATION LABS., INC.		
Adv Pg 3rd Cover	1045 Hamrah Hwy. Buffalo	NY
Conor Instruments Ltd.	Highbury Gr, London N5, England	
D. I. I. I. Nuclear Corp.	Via A. Bertoni 20, Milan	Ital
Dr. Vinn KG	37 Rosenlingweg, Bonn	Ger
Equipment Atomico Brasileiro Ltda.	Box 5084, Rio de Janeiro	Braz
FRANKLIN SYSTEMS, INC. Adv Pg 226	2724 Hillsboro Rd. W Palm Beach	Fla
Garrett Corp.	9851 Sepulveda Blvd, Los Angeles 45	Cal
General Dynamics/Electronics	108 Carlton Rd. Rochester 3	NY
General Dynamics /Fort Worth	Box 748 Fort Worth 1	Tex
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Nuclear Corp	1500 S Cypress Ave, Fullerton	Cal
General Nuclear Corp.	850-4 5th Ave. New York 16	NY
HAMMER ELECTRONICS CO. Adv Pg 213	Box 951, Princeton	NJ
Heath Co.	Benton Harbor	Mich
Hermetic Seal Transformer Co. Div. Dewey Ind. Inc.	805 N 5th St. Garland	Tex
Instruments for Industry	101 New South Rd. Hicksville	NY
INTERTECHNIQUE S.A. Adv Pg 112-E	61 rue Rouelles, Boulogne/Billancourt, Seine	Fr
INTUPS DEVELOPMENTS LTD.		
Adv Pg 74	Bath Rd. Swindon, Reading, Berks	Eng
Ital Elettronica S.p.A.	Via Ignazio Pesiungo 72, Rome	Ital
JOHNSON & ASSOCIATES, INC. WILLIAM B. 4,		
Adv Pg 226	Box 472, Montclair Lakes	NJ
KEITHLEY INSTRUMENTS, INC.		
Adv Pg 194	12415 Euclid Ave. Cleveland 6	Ohio
Kin Tel Div Cohu Electronics Inc	5725 Kearny Villa Rd, San Diego 12	Cal
Kobe Kogyo Corp.	1-5 Wakayama-Dori, Hyogo-ku, Kobe	Jap
Lauch Corp.	18435 Soledad Rd, Compton	Cal
Lamb & Nordrup Co.	4936 Stenton Ave. Phila 44	Pa
L'Electronique Appliquee	35 rue de Docteur Finlay, Paris 15, Fr	
Linco Industries	238 N Foothill Rd, Beverly Hills	Cal
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
Lockheed Aircraft Corp. Georgia Div.	1500 Northside Dr. NW, Atlanta 18	Ga
M. Tex Bosch, Inc.	40 Wheeler Ave. Pleasantville	NY
Magnetic Instruments Co. Inc.	237 Commerce St. Thornwood	NY
MINEAPOLIS-HONEYWELL REG.CO. HOL. PRODS GROUP.		
Adv. Pgs. 128, 240	Wayne & Windsor Aves. Phila. 44	Pa
N.A.A., Adv Pg 59	Box 732, State College	Pa
NERATOM, N. V., Adv Pg 113-F	Noordeinde 38, The Hague	Neth
NUCLEAR-CHICAGO CORP.,		
Adv. Pgs. 34-37	343 S Howard Ave. Des Plaines	Ill
Nuclear Enterprises (GB) Ltd.	Sighthill, Edinburgh 11	Scot
NUCLEAR ENTERPRISES LTD.,		
Adv Pg 194	330 Bury St. Wanstead 23	Eng
Nuclear Research Applications Ltd.	Bell St, Reigate (Surrey)	Eng
NUCLEONIC CORP. OF AMERICA,		
Adv Pg 202	196 Dupont St. Brooklyn 29	NY
OAK RIDGE TECHNICAL ENTERPRISES CORP.		
Adv Pg 229	Box 524, MS-OCT, Oak Ridge	Tenn
Philbrick Researches Inc., George A.	127 Clarendon St, Boston 16	Mass
Philco Corp. Govt. & Ind. Gp.	4700 Wissahickon Ave, Phila 44	Pa
Philips Electronic Instruments	750 S Fulton Ave, Mt. Vernon	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 187	Eindhoven	Neth
Picker X-Ray Corporation	1275 Mamaroneck Ave, White Plains	NY
Plasmatronics Inc	Centre & Glendale Sts, Exeter	Pa
RADIATION COUNTER LABS. INC.		
Adv. Pgs. 82, 83	5123 W Grove St. Skokie	Ill
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	465 Merrick Rd. Lynbrook	NY
RADIATION INSTRUMENT DEVELOPMENT LAB.		
Adv. Pgs. 216, 230A-D	41 E North Ave. Northlake	Ill
RADIATION TECHNOLOGY, INC.		
Adv. Pg. 3rd Cover	457 Antone St. NW, Atlanta 18	Ga
S. A. L. P.	38 Rue Gabriel Crie, Malakoff, Seine	Fr
Scott, Inc., II, 3	111 Powder Mill Rd. Maynard	Mass
SELO	Via Tendonia 87, Milan	Ital
Servomechanisms, Inc.	800 N Aviation Blvd. El Segundo	Cal
SHARP LABORATORIES, INC. Adv Pg 86	Box 1382, La Jolla	Cal
Siemens & Halske AG	Hauptverwaltung, 30, Karlstraße	Ger
Siemens-Reiniger-Werke AG.	Leipziger, 45, Erlangen, Germany	
Smith-Florence, Inc.	Overlake Ind. Pk. Box 717, Redmond	Wash
Solartron Electronic Group Ltd.	Victoria Rd, Farnborough, Hants	Eng
Southern Instruments, Ltd.	Frimley Rd. Camberley, Surrey, England	
Standard Tel. & Cables Ltd.	99 Glasshouse Yd, London EC 1	Eng
Standard Winding Co. Div. Octrom Corp.	44-48 Johnson St, Newburgh	NY
TRG, Inc	5 Aerial Way, Syosset	NY
TECHNICAL ASSOCIATES, Adv Pg 225	140 W Providencia Ave. Burbank	Cal
TECHNICAL MEASUREMENT CORP.		
Adv Pg 43	441 Washington Ave. North Haven	Conn
Telemetrix, Inc.	Box 500, Beaverton	Ore
Telecomputing Corp.	0195 Aero Dr. San Diego 11	Cal
Telectro Industries Corp.	35-16 19th St, LIC 1	NY
Tenelec Instrument Co.	Box 984, Oak Ridge	Tenn
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 113-C	240 W 17th St. New York 11	NY
THOMSON-HOUSTON (CIE. FRANCAISE),		
Adv Pg 112-D	173 Blvd. Haussman, Paris 8	Fr
TRACERLAB, INC. Adv. Pgs. 134, 113-5	1601 Trapelo Rd. Waltham 54	Mass
Trak Electronics Co. Inc.	Wilton	Conn
Trott Electronics, Inc.	412 Smith St, Rochester 8	NY
Vann Inc.	2001 Walnut St. Garland	Tex
VICTOREEN INSTRUMENT CO.,		
Adv. Pg. 4th Cover	5806-11 Hough Ave. Cleveland 3	Ohio

PRESSES
See FABRICATING EQUIPMENT

PRESSURE GAGES
See CONTROLS—PRESSURE GAGES—PRESSURE

PRESSURE—RELIEF DEVICES

Rock, Sivells & Byers, Inc.	1600 E 12 St, Kansas City 35	Mo
Cazal Ltd., Fenets	Abbey House, Kingsway, London WC 2	Eng
Cochrane Corp.	3634 17th St, Philadelphia 32	Pa
Crosby Valve & Gage Co. (Adams Valve)	4040 Kendrick St, Wrentham	Mass
General Controls Co.	801 Allen Ave. Glendale 1	Cal
Kidde & Co. Inc., Walter	577 Main St, Bellevile 9	NJ
Marbeson Co.	938 Paterson Plank Rd, E Rutherford	NJ
Parker Aircraft Co	5827 W Century Blvd, Los Angeles 45	Cal
Telecomputing Corp.	0195 Aero Dr. San Diego 11	Cal
Watts Regulator Co.	19 Embankment St, Lawrence	Mass

PRESSURE VESSELS—REACTOR
See VESSELS—PRESSURE, REACTOR

PRESSURIZERS—REACTOR

Advanced Technology Labs.	385 Whisman Rd. Mountain View	Cal
Alco Products, Inc.	Box 1665, Schenectady 5	NY
AVERY & SADL CO., Adv Pg 73	115 Rindge Ave. Cambridge	Mass
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Babcock & Wilcox Ltd.	209 Euston St, London NW 1, England	
Baldwin-Lima-Hamilton Corp.	Dept N 6, Philadelphia 42	Pa
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept, 600, Groton	Conn
FOSTER WHEELER CORP. Adv Pg 138	666 5th Ave. New York 19	NY
Kelley & Co., G. G.	90 Taylor St, Boston 35	Mass
Lodge Boiler & Engineering Corp.	2001 S Wolcott Ave, Chicago 8	Ill
NATIONAL ANNEALING BOX CO.		
Adv Pg 104	Box 338, Washington	Pa
National Forge Co	Irvine, Warren City	Pa
NERATOM, N. V., Adv Pg 113-F	Noordeinde 38, The Hague	Neth
New York Shipbuilding Corp.	Camden 1	NJ
SANDUSKY FOUNDRY & MACHINE CO.		
Adv Pg 23	7 Barker St. Sandusky	Ohio
Smith Corp., A. O., Atomic & Process Equip. Div.	3533 N 27 St, Milwaukee 1	Wis
Societa Fiver-Pesbent	265 rue Saint-Honore, Paris 1, France	
WESTINGHOUSE ELEC CORP. STEAM DIV.		
Adv. Pgs. 70, 71	Lester	Pa

PROCESS-CONTROL EQUIPMENT
See CONTROLS

PROPORTIONAL COUNTERS
See COUNTERS—RADIATION

PROTECTIVE COATINGS
See COATINGS—PROTECTIVE
PAINTS—PROTECTIVE

PULSE-HEIGHT ANALYZERS
See ANALYZERS—PULSE-HEIGHT

PULSERS

Chesapeake Instrument Corp.	Shadyside	Md
EDGERTON, GERMESHAUSEN & GRIER, INC.		
Adv Pg 195	160 Brookline Ave. Boston 15	Mass
General Nuclear Corp	1500 S Cypress Ave, Fullerton	Cal
General Radio Co.	West Concord	Mass
L'Electronique Appliquee	35 rue de Docteur Finlay, Paris 15, Fr	
Ohio Nuclear Inc.	5710 Knickerbocker Rd. Cleve 49	Ohio
Radiation Instrument Co.	Box 735, Silver Spring	Md
RADIATION TECHNOLOGY, INC.		
Adv. Pg. 3rd Cover	457 Antone St. NW, Atlanta 18	Ga
SAINT-GERAIN NUCLEAIRE, Adv Pg 229	23 Rd G. Clemenceau, Courbevoie, Seine	Fr
SELO	Via Tendonia 87, Milan	Ital
Valor Instruments, Inc.	13034 Crenshaw Blvd. Gardena	Cal

PULVERIZERS
See MILLS

PUMPS
See Also FANS & BLOWERS
VACUUM EQUIPMENT

1. CANNED-MOTOR
2. CANNED-ROTOR
3. CENTRIFUGAL
4. CENTRIFUGAL, MECHANICALLY SEALED
5. CONTROLLED-LEAKAGE
6. DIAPHRAGM
7. DIFFUSION
8. ELECTROMAGNETIC
9. GAS-FILLED
10. METERING
11. SUBMERSED-MOTOR
12. VACUUM

Abbe Engineering Co. 12	420 Lexington Ave. New York 17	NY
Air Control, Inc. 6	450 Narberth Ave, Narberth	Pa
Allen Sons & Co. Ltd., W. H., Queens Engineering Wks. 9	Bedford	Eng
ALLIED ENGINEERING & PRODUCTION CORP. 10,		
Adv Pg 242	2621 Harding Ave. Alameda	Cal

ALLIS-CHALMERS MFG. CO. 1-2-3-4-5-12,
Adv. Pgs. 109-111 ..... 900 S 70th St. Milwaukee ..... Wis
American Instrument Co. Inc. 2-6 ..... 8030 Georgia Ave. Silver Spring ..... Md
American Radio Co. Inc. 12 ..... 445 Park Ave. New York 22 ..... NY
American Smelting Co. 12 ..... Box 4200, Erie ..... Pa
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, 1-2-3-4-5-11-12,
Adv Pg 112-D ..... Charleroi ..... Belg
Atomic Labs Sub. Comm. 12 ..... 5000 Clarendon Ave. Berkeley 5 ..... Cal
AUTOCLAVE ENGINEERS, INC., 6-10,
Adv Pg 209 ..... 2930 W 22nd St. Erie ..... Pa
B-I-F Industries, Div. NY Air Brake Co.
6-10 ..... 1009-D Harris Ave. Providence 1 ..... RI
Bacharach Inc. 12 ..... 430 Lexington Ave. New York 17 ..... NY
Bass, John, Div. FMC Corp. 10 ..... 1300 S Cedar St. Lansing ..... Mich
Bingham Pump Co. 2-6-8-11-12 ..... 2001 NW Front Ave. Portland 10 ..... Ore
Buffalo Forge Co. 2-3-6-8 ..... 490 Broadway, Buffalo 6 ..... NY
Byron Jackson of Canada Ltd 1-2-3-4-11
Box 160, Sta. H, Toronto 13, Ont. Can
BYRON JACKSON PUMPS, INC. 1-2-3-4-5-8-11,
Adv Pg 16 ..... 2300 E Vernon Ave. Los Angeles 58 ..... Cal
Canadian Westinghouse Co. Ltd. 1 ..... Box 510, Hamilton, Ontario, Canada
CENTRAL SCIENTIFIC CO. 12
Adv Pg 112 ..... 1700 Irving Park Rd. Chicago 13 Ill
CHANDLER EVANS CORP. 3-6-10
Adv Pg 120 ..... Chester Oak Blvd. West Hartford ..... Conn
Chemillan Engrg. Wks. Ltd. 1 ..... 160 Rue de Lyon, Geneva ..... Switz
Chesapeake Div. Pneumo Corp., 1-6-8-11 Beck & County Line Rd.
Huntingdon Valley ..... Pa
Compressors a Membrane Corbin, 6 ..... 86 bd. Saint Marcel, Paris 5 ..... Fr
Consolidated Electrodynamics Corp. 12 ..... 300 Sierra Madre Villa, Pasadena ..... Cal
Consolidated Pneumatic Tool Co. 12 ..... 2202 Dewey Rd. London S.W.6 ..... Eng
Consolidated Vacuum Corp. 12 ..... 1775 Mt. Read Blvd. Rochester ..... NY
Cortez Co. Inc. 1-3 ..... 685 Myrtle Ave. Boonton ..... NJ
Dean Brothers Pumps Inc. 3-4 ..... 333 W 10 St. Indianapolis ..... Ind
Delta Design, Inc. 12 ..... 3180 Adams Ave. San Diego 16 ..... Cal
Denning Co. 2-12 ..... Broadway Ave. Salem ..... Ohio
De Vilbiss Co. 6 ..... 300 Phillips Ave. Toledo 3 ..... Ohio
Dorr-Oliver Inc. 3-4-6 ..... 77 Havemeyer Ln. Stamford ..... Conn
Dorrance-Roll, Inc. 3-6-12 ..... 179 South St. West Hartford 10 ..... Conn
Dorriton Co. Inc. 3-4 ..... 4401 N Findlay St. Dayton 4 ..... Ohio
Dynatech Corp. 2-6-8-12 ..... 830 Massachusetts Ave. Cambridge 39 ..... Mass
Eastern Industries Div. LFE, Inc. 3-6-11 ..... 100 Skiff St. Hamden 14 ..... Conn
Edwards High Vacuum, Inc. 12 ..... 3279 Grand Island Blvd. Grand Island ..... NY
Fischer & Porter Co. 12 ..... 10 Warminster Rd. Warminster ..... Pa
Flight Refueling Inc. 3 ..... Box 1701, Baltimore 3 ..... Md
Forges & Ateliers de Cons. Electriques
de Jeumont, 1-2-3-4 ..... 5 pl. Rio-de-Janeiro, Paris 8e ..... Fr
Garnet Corp. 2-6-11 ..... 3801 Sepulveda Blvd. Los Angeles 45 ..... Cal
Gast Mfg. Corp. 12 ..... Box 1170-M, Benton Harbor ..... Mich
GILMAN INSTRUMENT CO. 12,
Adv Pg 233 ..... Box 1184-M, Chelsea ..... Mich
GENERAL ELECTRIC CO. APPARATUS SALES, 8,
Adv. Pgs. 11, 12 ..... 1 River Rd. Schenectady 5 ..... NY
General Eng. Co. (Radcliffe) Ltd. 12 ..... Bury Rd. Radcliffe, Lancs. ..... Eng
General Kinetics Corp. 1-2-3-4-5 ..... 197 S Van Brunt St. Englewood ..... NJ
General Vacuum Corp. 12 ..... 81 Hicks Ave. Medford ..... Mass
Goodenough Pumps Ltd. 6-8 ..... 112 Jermyn St. London SW 1 ..... Eng
Graham Mfg. Co., Inc. 12 ..... 170 Great Neck Rd. Great Neck ..... NY
HAGAN CHEMICALS & CONTROLS, INC. 10,
Adv Pg 28 ..... Box 1346, Pittsburgh 30 ..... Pa
Hallberg Messtechnik & Giessmann, 1-2-3-
4-6-11 ..... Ludwigshafen, Rhein ..... Ger
Hanworth Engineering Ltd. 1-2-3-4 ..... Poole, Dorset ..... Eng
Heaters, Inc. 3 ..... Box 54, York ..... Pa
Hills-McCanna Co. 6-10 ..... 600 Maple Ave. Carpentersville Ill
Hitachi, Ltd. 1 ..... 1-4-chome Marunouchi, Chiyoda-ku,
Tokyo ..... Jap
Hoffinger Machine Co. Ltd. 6 ..... 5800 St. Urbain St. Montreal ..... Can
Hupp Aviation Co. Div. of Hupp Corp. ..... 6600 W 65th St. Chicago 38 Ill
Ingersoll-Rand Co., 3-4-10 ..... 11 Broadway, New York 4 ..... NY
International Paint & Machine Works,
7-12 ..... 91 Dana Ave. Livingston ..... NJ
JENAER GLASWERKSCHOTT & GEN. 7,
Adv Pg 112-B ..... 55 Hattenbach, Mainz/Rhein ..... W Ger
Joy Mfg. Co. Industrial Div. 12 ..... N. W. Oliver Bldg. Pittsburgh 22 ..... Pa
Kahl Scientific Instrument Corp. 12 ..... Box 1328, El Cajon ..... Cal
Kahlenberg Bros. Co. 3-4 ..... 12th & Monroe St. Two Rivers ..... Wis
Kinney Vacuum Div. The N. Y. Air Brake
Co. 7-12 ..... 3850 Washington St. Boston 30 ..... Mass
Laclede Co. 2 ..... 5401 S Packard Ave. Cudahy ..... Wis
Lapp Insulator Co. Inc. 6-8-10 ..... 180 Gamble St. Lyons ..... NY
Lawrence Pumps Inc., 1-2-3-6-8 ..... 371 Market St. Lawrence ..... Mass
Layne & Bowler, Inc. 3-6-12 ..... Box 6097, Hollywood Sta. Memphis 8 ..... Tenn
Liquid Metals, Inc. 9 ..... Box 2008, Wayland ..... Mass
Litton Engineering Labs. 7 ..... Box 840, Gene Valley ..... Cal
Lourette Rubber Co., 3 ..... Box 2191, Trenton 7 ..... NJ
Lukas Research Corp. 7 ..... Gallery ..... Pa
Marmetta Pumps Ltd. 16 ..... 23 The Mall, Ealing, London, W5, Eng
MBC EQUIPMENT CORP. NATIONAL RESEARCH CORP. 7-12,
Adv Pg 220 ..... 80 Charlemont St. Newton Highlands 61 ..... Mass
Magic Pumps, Inc. 3-6 ..... 2340 Center Ave. Chicago Hgts. Ill
Mesh Engineering Co. 12 ..... 450 Wilson Rd. S Norwalk ..... Conn
NATIONAL CARBON CO. DIV. OF UCC, 4,
Adv. Pgs. 96, 97 ..... 270 Park Ave. New York 17 ..... NY
National Research Corp. 12 ..... 70 Memorial Dr. Cambridge 42 ..... Mass
NERATOMA, N. V., 1-2-3-4-5,
Adv Pg 112-F ..... Hoendiende 38, The Hague ..... Neth
New York Air Brake Co., 2-4-7-17-12 ..... 230 Park Ave. New York 17 ..... NY
Ohio Nuclear Inc. ..... 27100 Kinkerbocker Rd. Cleve 40 ..... Ohio
Oronde Engines Ltd. 4 ..... Box 4016 Term A, Toronto ..... Can
Pacific Pumps, Inc. 3-4-6 ..... 5715 Richter St. Huntington Park ..... Cal
PEERLESS PUMP HYDRODYNAMICS DIV., FMC CORP., 3-4-5-11,
Adv Pg 103 ..... 301 West Ave. 26, LA 31 ..... Cal
Process & Instruments Corp. 10 ..... 15 Stone Ave. Brooklyn 20 ..... NY
Pulsometer Pumps Ltd. Nine Elms Iron
Wks. 3 ..... Reading ..... Eng
Pumps & Softeners Ltd. 4 ..... 680 Waterloo St. London ..... Ont
Randolph Pump Co., 10 ..... 1018 Rusk St. Houston 19 ..... Tex
Robbins & Myers, Inc. 1-2-10 ..... 1345 Lagonda Ave. Springfield ..... Ohio
Rockwell Co., W. S. 6 ..... 500 Eliot St. Fairfield ..... Conn
Roy Co., Milton, 6-10 ..... 1300 E Mermaid Ln. Phila 18 ..... Pa
SAINT-GOBAIN NUCLEAIRE, 4,
Adv Pg 229 ..... 23 Bd G. Clemenceau, Courbevoie, Seine ..... Fr
Sarco Co. Inc., 12, ... 653 Madison Ave. New York 22 ..... NY
Schenck Scientific Div. Schenck & Co. 10 ..... 75 Cliff St. New York 38 ..... NY
Scientific Glass Apparatus Co. Inc., 12 ..... 108 Lakewood Ter. Bloomfield ..... NJ
SOCIETE RATEAU, 1-2-3-6-5-11,
Adv Pg 112-T ..... Rue Rateau La Courneuve, Seine ..... Fr
STOKES CORP., F. J. 7-12, Adv Pg 245 ..... 5500 Tabor Rd. Philadelphia 20 ..... Pa
Sulzer Bros. Ltd. 1-2-6-8-11-12 ..... Winterthur ..... Switz
Taylor Div. Thompson Ramo Wooldridge
Inc. 4-6-8 ..... 10555 Euclid Ave. Cleveland 17 ..... Ohio
Telecomputing Corp. 6-8-10-12 ..... 8155 Aero Dr. San Diego 11 ..... Cal
Temperature Engineering Corp., 12 ..... 1250 Tempcor Blvd. Riverton ..... NJ
THOMSON-HOUSTON (CIE. FRANCAISE), 12,
Adv Pg 112-D ..... 173 Blvd. Haussman, Paris 8 ..... Fr
Tosi, S.p.A., Fosson, 3-4 ..... Legnano, Milan ..... Ital
Turbocraft Inc. 1-2-3-6-8 ..... 1946 S Myrtle Ave. Monrovia ..... Cal
Ulmer Co., H. W. 12 ..... 2941 San Luis Rey Rd. Oceanside ..... Cal
U. S. STEEL CORP. 3, Adv. Pgs. 50, 51 ..... 525 Wm. Penn Pl. Pittsburgh 30 ..... Pa
Vacuum Apparatus Co. 7-12 ..... Box 1001, Palo Alto ..... Cal
Vacuum-Electronic Corp. 12 ..... Terminal Dr. Plainview ..... NY
Vacuum Ind. Applications, Ltd., 12 ..... Hetherton Rd. Wishaw, Lanarkshire ..... Scot
Vacuum Specialties Inc. 7-12 ..... 34 Linden St. Somerville 2 ..... Mass
Varian Associates, 12 ..... 611 Hansen Way. Palo Alto ..... Cal
Wallace & Tiernan, Inc., 8-10 ..... 25 Main St. Belleville 9 ..... NJ
Warren Pumps, Inc. 3-6-10 ..... Warren ..... Mass
WELCH SCIENTIFIC CO. 3-7-12,
Adv Pg 192 ..... 1515 Sedgwick St. Chicago 10 Ill
WESTINGHOUSE ELEC. CORP. ATOMIC EQUIPMENT DEPT. 1-2-3-8-11,
Adv. Pgs. 18, 19 & 20, 21 ..... Cheswick ..... Pa
Wheeler Mfg. Co. C. H. 1-2-6-8-11-12 ..... 1800 Sedgley Ave. Philadelphia 32 ..... Pa
Whitaker Hall & Co. (1898) Ltd. 12 ..... Sheffield, Manchester, England
WORTHINGTON CORP. 1-2-3-4-5-6-11-12,
Adv. Pg. 2nd Cover ..... 401 Worthington Ave. Harrison ..... NJ

PURIFIERS—WATER
See DEMINERALIZERS
WATER CONDITIONERS

PYROMETERS

Aminco International Div. NAA Inc. ..... Box 200, Canoga Park ..... Cal
BAILEY METER CO. Adv Pg 69 ..... 29801 Euclid Ave. Wickliffe ..... Ohio
Bailey Meter Co. Ltd. ..... 5010 St. Catherine St. W. Montreal, Que Can
Bristol Co. ..... Box 1790 HBG, Waterbury 90 ..... Conn
Cambridge Instrument Co. Inc. ..... 430 Lexington Ave. New York 17 ..... NY
Cambridge Instrument Co., Ltd. ..... 13 Grosvenor Pl. London SW1, Eng
CENTRAL SCIENTIFIC CO. Adv Pg 112 ..... 1700 Irving Park Rd. Chicago 13 Ill
Degussa ..... Box 3993 Frankfurt/Main ..... Ger
Electronics Corp. of America ..... 1 Memorial Dr. Cambridge 42 ..... Mass
Engelhard Industries, Inc. ..... 113 Astor St. Newark 2 ..... NJ
Epic, Inc. ..... 150 Nassau St. New York 38 ..... NY
Evershed & Vignoles, Ltd. Acton Lane
Wks. ..... Chiswick, London W4 ..... Eng
Fielden Electronics Ltd. ..... Fielco Rd. Wythenshawe,
Manchester 23, England
Foster Instrument Co. Ltd. ..... Leicester, Leics. England
General Controls Co. ..... 801 Allen Ave. Glendale 1 ..... Cal
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 12 ..... 1 River Rd. Schenectady 5 ..... NY
Honeywell Controls, Ltd. ..... Wentworth Ave. Toronto, Ont. Canada
Leeds & Northrup Co. ..... 4901 Stenton Ave. Phila 44 ..... Pa
MINN-HONEYWELL REG CO. MED. PRODS GROUP,
Adv. Pgs. 126, 127 ..... Wayne & Hadrian Aves. Phila. 44 ..... Pa
PYRO-ELECTRIC, INC. Adv Pg 7 ..... Nesbitt Rd. Fairfield ..... Ind
Pyrometer Instruments Co. Inc. ..... 92 Portland Ave. Bergenfield ..... NJ
Siemens & Halske AG ..... Rheinbrueckenstr. 50, Karlsruhe, Germany
THERMO ELECTRIC CO. INC.
Adv. Pg 208 ..... Saddle Brook ..... NJ

QUARTZ—FUSED

Brac Metallurgical-Chemical Co. ..... 850 65th Ave. Philadelphia 26 ..... Pa
Corning Glass Works, Shielding Radiation ..... Corning ..... NY
Engelhard Industries, Inc. ..... 113 Astor St. Newark 2 ..... NJ
Engle Equipment Co. ..... 401 S Dearborn St. Chicago Ill
Mackey, Inc., A. D. ..... 136 Broadway, New York 26 ..... NY
Quartz & Silice, S. A. ..... 8 rue d' Anjou, Paris ..... Fr
RADIATION COUNTER LABS. INC.
Adv. Pgs. 82, 83 ..... 5122 W Grove St. Skokie Ill
TERMINAL RADIO INTERNATIONAL LTD.
Adv Pg 112-C ..... 240 W 17th St. New York 11 ..... NY
THERMAL AMERICAN FUSED QUARTZ CO INC.
Adv Pg 110 ..... 16-20 Salem St. Dover ..... NJ

RADIATION ABSORBERS
See ABSORBERS—RADIATION

RADIATION APPLICATIONS
See SERV. & CONS'LT: RADIOISOTOPE & RADIATION APPLICATIONS

RADIATION DETECTORS
See COUNTERS—RADIATION

RADIATION EFFECTS—MATERIALS
See SERV. & CONS'LT: RADIATION EFFECTS—MATERIALS

RADIATION—FIELD EVALUATION
See SERV. & CONS'LT: RADIATION—FIELD EVALUATION

RADIATION PROCESSES
See IRRADIATORS
SERV. & CONS'LT: IRRADIATION

RADIOACTIVE SOURCES
See SOURCES—RADIOACTIVE

RADIOACTIVE-WASTE DISPOSAL
See SERV. & CONS'LT: WASTE DISPOSAL, RADIOACTIVE
SERV. & CONS'LT: WASTE TREATMENT, RADIOACTIVE
WASTE—DISPOSAL EQUIPMENT

RADIOACTIVITY STANDARDS
See SOURCES—RADIOACTIVE

RADIOCHEMICAL SERVICES
See SERV. & CONS'LT: RADIOCHEMICAL

RADIOGRAPHIC EQUIPMENT
See Also SERVICES: RADIOGRAPHY
1. GAMMA RAY
2. X-RAY

ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV. 1,
Adv. Pgs. 115, 231 ..... Box 93, Ottawa, Ont ..... Can
Baird Co. Instruments Div. 1 ..... Box 240, Phoenixville ..... Pa
Canadian Radium & Uranium Corp. 1 ..... 630 5th Ave. New York 20 ..... NY
Curtiss-Wright Corp. Princeton Div. 1-2 ..... Box 110, Princeton ..... NJ
Engle Equipment Co. 1-2 ..... 401 S Dearborn St. Chicago Ill
Equipment Americas Brasilia Ltda. 1 ..... Box 2084, Rio de Janeiro ..... Braz
Falk & Co. Ltd., M. 3 ..... Emsley House, Belgrave, Surrey, Eng
Gamma Industrie, 1-2 ..... 22 Rue de Dunkerque, Paris 9 ..... Fr
HIGH VOLTAGE ENGINEERING CORP. 2
Adv Pg 179 ..... 5 Bedford St. Burlington ..... Mass
HUGHES AIRCRAFT CO. HUGLEONICS LAB. 1-2,
Adv Pg 205 ..... Box 3987, Fullerton ..... Cal
Jun Pennsylvania Mfg. Corp. 1-2 ..... 5 Huron Dr. Natick ..... Mass
Kobe Kogyo Corp. 1 ..... 1-5 Wakayama-Dori, Hyogo-ku, Kobe ..... Jap
LAND-AIR INC. SUB. DYNALECTRON INC. 2,
Adv Pg 204 ..... 7466 W Wilson Ave. Chicago 31 Ill
Lead Fabricators, Inc. 8 ..... 25 Belgrove Dr. Kearny ..... NJ
Lockheed Aircraft Corp. 8 ..... Box 551 Burbank ..... Cal
Mitchell Radiation Products Corp. 1-2 ..... E Washington St. Norristown ..... Pa
NERATOMA, N. V., 1-2, Adv Pg 112-F ..... Hoendiende 38, The Hague ..... Neth
NEVERSINK MACHINE CORP., 2,
Adv Pg 93 ..... Silver Creek ..... NY
Nuclear Consultants Corp. 1 ..... 6040 Manchester Rd. St. Louis 19 ..... Mo
Pneumo Ltd. 2 ..... Vista Rd. Winsford, Berks ..... Eng
Pneumotec Ltd. ..... 56 Princess St. Hanover Sq. London W1 ..... Eng
Philips Electronic Instruments, 1 ..... 750 S Fulton Ave. Mt. Vernon ..... NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. 1-2,
Adv Pg 187 ..... Eindhoven ..... Neth
Picker X-Ray Corp. 1-2 ..... 25 S Broadway, White Plains ..... NY
Radiation Dynamics Inc. 2 ..... Westbury Industrial Pk. Westbury ..... NY
Radiation Products, Inc. ..... Pt. 40 Rd. Flushing 55 ..... NY
Radionics Inc. 1 ..... Lafayette & Water Sts. Norristown ..... Pa
RADIUM CHEMICAL CO. INC. 1,
Adv Pg 12 ..... 161 E 42nd St. New York 17 ..... NY
Reichert-Elektronik GmbH, 1-6 ..... Trier-Mosel-Petrisberg ..... W Ger
St. John X-Ray Laboratory, 1-2 ..... Califon ..... NJ
Siemens & Halske AG, 1-2 ..... Rheinbrueckenstr. 50, Karlsruhe ..... Ger
Solus-Schall, Ltd., 1-6 ..... Honeypot Ln. Stanmore, Middx ..... Eng
Technical Operations, Inc. 1 ..... South Ave. Burlington ..... Mass
TRACERLAB, INC. 1,
Adv. Pgs. 124, 125-6 ..... 1601 Trapelo Rd. Waltham 54 ..... Mass
U. S. NUCLEAR CORP., 1, Adv Pg 127 ..... 801 W Lake St. Box 2022, Burbank ..... Cal
VICTOREEN INSTRUMENT CO. 1-2,
Adv. Pg. 4th Cover ..... 5806-11 Hough Ave. Cleveland 3 ..... Ohio
X-Ray Dept. of General Electric Co. 2 ..... 4855 Electric Ave. Milwaukee ..... Wis
Zenith Radio Research Corp. 2 ..... 4640 Campbell Ave. Menlo Park ..... Cal

RADIOISOTOPE ANALYSIS
See SERV. & CONS'LT: RADIOISOTOPE ANALYSIS

RADIOISOTOPES
See ISOTOPES—RADIOACTIVE

RADIUM
See METALS, ALLOYS & COMPOUNDS

RARE EARTHS
See METALS, ALLOYS & COMPOUNDS

RATEMETERS
See METERS—COUNTING-RATE

REACTOR CONTROLS
See REACTOR INSTRUMENT SYSTEMS

REACTOR COMPONENTS
See CALANDRIAS—REACTOR
CONTAINMENT STRUCTURES—REACTOR
CONTROL SYSTEMS—REACTOR
DOORS—AIRTIGHT-ACCESS
FUEL ELEMENTS—REACTOR
LOOPS—TEST
MODERATORS
POWER PLANT COMPONENTS
POWER PLANTS—NUCLEAR
PRESSURIZERS—REACTOR
REACTOR INSTRUMENT SYSTEMS
REACTORS—NUCLEAR
REFUELING EQUIPMENT—REACTOR
SHIELDING—RADIATION
VESSELS—PRESSURE, REACTOR
WIRE & CABLE—RADIATION-RESISTANT

REACTOR DESIGN SERVICES
See SERV. & CONS'LT: REACTOR COMPONENTS—DESIGN
SERV. & CONS'LT: REACTOR CONTROL SYSTEMS—DESIGN
SERV. & CONS'LT: REACTOR DESIGN

REACTOR ECONOMICS CONSULTING
See SERV. & CONS'LT: REACTOR ECONOMICS

REACTOR FUELS
See FUEL ELEMENTS
SERV. & CONS'LT: REACTOR FUEL ELEMENTS R & D

REACTOR-HAZARD EVALUATION
See SERV. & CONS'LT: REACTOR-HAZARD EVALUATION

REACTOR INSTRUMENT SYSTEMS
See Also CONTROL SYSTEMS—REACTOR
METERS—REACTOR PERIOD
MONITORS—RADIATION
REACTOR MONITORING SYSTEMS
1. NUCLEAR
2. PROCESS, FLOW
3. PROCESS, PRESSURE
4. PROCESS, TEMPERATURE

AEG, 1-2-3-4, Adv Pg 112-A	Nuetheuer, Frankfurt/Main, Germany	
Advanced Technology Labs.	300 Whisman Rd, Mountain View	Cal
Aerosol Industries Inc. Control Equip. Div. 2-3-4	Comly Ave, Greenwich	Conn
Alco Products, Inc. 1	Box 1005, Schenectady 5	NY
Appleby & Ireland, Ltd., 2-3	Mark Lane, Basingstoke, Hants	Eng
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, 1,		
Adv Pg 112-D	Charleroi	Belg
Automatic Control Engrg. Ltd. 1-2-3-4	Rosby Pl. Seagrave Rd, London SW6	Eng
AVIEX, INC. 2, Adv Pg 104	18-10 Northern Blvd. Woodside 77	NY
BAILEY METER CO. 2-3-4, Adv Pg 89	29801 Euclid Ave. Wickliffe	Ohio
Bailey Meter Co. Ltd. 2-3-4	5010 St. Catherine St. W, Montreal, Que	Can
BELGONUCLEAIRE, 1, Adv Pg 112-L	35 rue des Colonies, Brussels 1	Belg
Bendix Corp. Cincinnati Div. 1-3	3130 Wasson Rd. Cincinnati 6	Ohio
Bristol Co. 2-3-4	Box 1790 WBG, Waterbury 20	Conn
Burns & Roe, Inc. 1-2-3-4	160 W Broadway, New York 13	NY
Canadian Westinghouse Co. Ltd.	Box 510, Hamilton, Ontario, Canada	
CHANDLER EVANS CORP. 2-3		
Adv Pg 139	Charter Oak Blvd. West Hartford	Conn
Consolidated Controls Corp. 2-3-4	14 Durant Ave. Bethel	Conn
Copes-Vulcan Div. Blaw-Knox Co. 2-3-4	200 W 26 St. Erie 4	Pa
Curtiss-Wright Corp. Princeton Div. 1-3	Box 110, Princeton	NJ
D. I. S. I. Nuclear Corp. 1	Via A. Bonfoni 20, Milan	Ital
Designers for Industry, Inc. 1-2-3-4	4041 Pulaski Pkwy. Cleveland 9	Ohio
Dynatech Corp. 2-3-4	600 Massachusetts Ave. Cambridge 39	Mass
Eckardt AG, J. C. 2-3-4	Pforzh. 75/BB, Sachsen-Ind Commerzbt	Ger
EGGERTON, GERMESHAUSEN & GRIER, INC.		
Adv Pg 105	160 Brookline Ave. Boston 15	Mass
ESCO ELECTRONICS LTD. AMERICAN TRADAIR CORP. 1,		
Adv Pg 219	Southend-on-Sea, Essex	Eng
Electrofio Motors Co. Ltd. 2-3-4	Abbey Rd, Park Royal, NW 10, London	Eng
Evershed & Vignoles, Ltd. Acton Lane Wks. 2-3	Chiswick, London W4	Eng
Fielden Electronics Ltd. 2-4	Paxton Rd. Wythenshawe, Manchester 22, England	
Firth Cleveland Instruments Ltd. 2	Trafford, Pontypridd, Glamorgan	Wls
FOXBORO CO. 2-3-4, Adv Pg 180	38 Neponset Ave. Foxboro	Mass
Fuji Electric Mfg. Co. Ltd. 1-2-3-4	2-8 Mamouchi, Chiyoda-ku, Tokyo	Jap
General Dynamics/Electronics, 1-2-3-4	100 Carlton Rd. Rochester 3	NY
GENERAL ELECTRIC CO. APPARATUS SALES, 1-2-3-4,		
Adv. Pgs. 11, 12	1 River Rd. Schenectady 5	NY
HARAN CHEMICALS & CONTROLS, INC. 2-3-4,		
Adv Pg 28	Box 1366, Pittsburgh 30	Pa
HAZLETON-NUCLEAR SCIENCE CORP. 2,		
Adv Pg 38	0863 Fabian Way, Palo Alto	Cal
Hitachi, Ltd, 1-4	1-4-chome Marunouchi, Chiyoda-ku, Tokyo	Jap
INTERNUCLEAR CO. 1, Adv Pg 240	7 N Brentwood Blvd. Clayton 5	Mo
Leeds & Northrup Ltd., 4	Broad St, Birmingham 15	Eng
LIONEL ELECTRONIC LABS. 1,		
Adv Pg 218	1226 Flushing Ave. Brooklyn 37	NY
Lockheed Aircraft Corp. 1	Box 551, Burbank	Cal
Malcolm Lyle Inc. 1	191 Mill Lane, Moonstownship	NJ
Marquardt Corp. 1-2-3-4	16555 Saticoy St., Van Nuys	Cal
Mason-Neilan Div. of Worthington Corp. 2-3-4	Norwood	Mass
MINN-HONEYWELL REG CO. MOD. PRODS GROUP, 1-2-3-4,		
Adv. Pgs. 120, 240	Wayne & Windrim Aves. Philo. 44	Pa
Monitor Systems Inc. 1-2-3-4	Dept. 7, Ft. Wash. Ind. Pk, Ft. Wash.	Pa
Negretti & Zambra (Canada) Ltd. 2-4	4 Brentcliff Rd. Toronto 16	Ont
NERATOMA, N. V., 1-2-3-4,		
Adv Pg 113-P	Nassalaan 38, The Hague	Neth
Nuclear Corp. 1-2	3434 S 3rd St, St. Louis 60	Mo
NUCLEAR ENTERPRISES LTD. 1,		
Adv Pg 194	550 Berry St. Winnipeg 21	Man
NUCLEAR MEASUREMENTS CORP. 1,		
Adv Pg 237	2460 N Arlington Ave. Indianapolis 18	Ind
Pall Corp. 2	Glen Cove	NY
Paterson Ltd.	55 Princess St, Hanover Sq, London W1	Eng
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. 2-3-4,		
Adv Pg 187	Eindhoven	Neth
PHYSICAL SCIENCES CORP. 1-2,		
Adv Pg 38	189 N Fair Oaks Ave. Pasadena	Cal
Plowey Nucleonics Ltd. 1	Wooden Rd, Northampton, England	
Pye, Ltd. 1-2-3-4	St. Andrews Rd, Cambridge, England	
Rochester Instrument Systems Inc. 1-2-3-4	276 N Union St, Rochester 6	NY
Siemens & Halske AG, 1-2-3-4	Rheinstrasse 20, Karlsruhe, Germany	
SYSTEMS ENGINEERING LAB. INC., 1-2-3-4,		
Adv Pg 198	Box 9140, Fort Lauderdale	Fla
Taylor Instrument Cos. 2-3-4	95 Ames St, Rochester 1	NY
TELEFLEX INC. 1, Adv Pg 243	Church Rd. North Wales	Pa
TERMINAL RADIO INTERNATIONAL LTD. 1,		
Adv Pg 113-C	240 W 17th St. New York 11	NY
Thompson, Ltd., John, 1-2-3-4	Wolverhampton	Eng
THOMSON-HOUSTON (CIE. FRANCAISE), 1,		
Adv Pg 113-D	173 Blvd. Haussmann, Paris 8	Fr
Trans-Sonics, Inc., 2-4	Box 203, Lexington 73	Mass
UNITED NUCLEAR CORP. 1, Adv Pg 36	305 Worcester Ave. New Haven 4	Conn
U. S. Controls, Inc. 1-2-3-4	410 Fourth Ave, Brooklyn 15	NY
VICTOREEN INSTRUMENT CO. 1,		
Adv. Pg. 4th Cover	5806-11 Hough Ave. Cleveland 3	Ohio
Webster Instruments Corp. 2-4	156 E Merrick Rd, Freeport	NY
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. SECT. 1-2-3-4,		
Adv. Pgs. 70, 71	Pittsburgh	Pa
Zeal Ltd., G. H. 4	Lombard Rd. Merton Rd. Merton, London SW19	Eng

REACTOR MONITORING SYSTEMS

AEG, Adv Pg 112-A	Nuetheuer, Frankfurt/Main, Germany	
Aerosol Div Aerojet-General Corp	610 N Citrus Ave, Covina	Cal
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,		
Adv Pg 112-D	Charleroi	Belg
Automatic Control Engrg. Ltd.	Rosby Pl. Seagrave Rd, London SW6	Eng
Anti-Aware	11 rue de la Pepiniere, Paris 8e	Fr
Bell Telephone Mfg. Co.	33 Berkenrode, Hoboken/Antwerp	Belg
Bendix Corp. Cincinnati Div.	3130 Wasson Rd. Cincinnati 6	Ohio
Burns & Roe, Inc.	160 W Broadway, New York 13	NY
Canadian Westinghouse Co. Ltd.	Box 510, Hamilton, Ontario, Canada	
D. I. S. I. Nuclear Corp.	Via A. Bonfoni 20, Milan	Ital
Dates Corp.	1207 S Myrtle Ave. Monrovia	Cal
Dynamics Inc. Control Systems Div.	6455 Mission Rd. La Jolla	Cal
Dr. Vinn KG	20 Beethovenweg, Bonn	Ger
EGGERTON, GERMESHAUSEN & GRIER, INC.		
Adv Pg 105	160 Brookline Ave. Boston 15	Mass
ESCO ELECTRONICS LTD. AMERICAN TRADAIR CORP.		
Adv Pg 219	Southend-on-Sea, Essex	Eng
FRIESZKE & HOEFFNER GMBH.		
Adv Pg 113-H	Erlangen-Bruck	Ger
Fuji Electric Mfg. Co. Ltd.	2-8 Mamouchi, Chiyoda-ku, Tokyo	Jap
General Dynamics/Electronics	100 Carlton Rd. Rochester 3	NY
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 12	1 River Rd. Schenectady 5	NY
General Electric Co. Ltd. of England	Erith, Kent, England	
General Nuclear Corp	1333 S Cypress Ave, Fullerton	Cal
Hitachi, Ltd	1-4-chome Marunouchi, Chiyoda-ku, Tokyo	Jap
Kahl Scientific Instrument Corp.	Box 1188, El Cajon	Cal
Leeds & Northrup Co.	4858 Stenton Ave, Philo 44	Pa
LIONEL ELECTRONIC LABS.		
Adv Pg 218	1226 Flushing Ave. Brooklyn 37	NY
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lockheed Aircraft Corp. Georgia Div.	1200 Northside Dr. NW, Atlanta 18	Ga
MINN-HONEYWELL REG CO. MOD. PRODS GROUP,		
Adv. Pgs. 120, 240	Wayne & Windrim Aves. Philo. 44	Pa
Monitor Systems Inc.	Dept. 7, Ft. Wash. Ind. Pk, Ft. Wash.	Pa
Monsanto Inc. Sub. Model Eng. & Mfg. Co.	4870 S State St, Salt Lake City	Utah
NERATOMA, N. V., Adv Pg 113-P	Nassalaan 38, The Hague	Neth
Nuclear Enterprises (GB) Ltd.	Sighthill, Edinburgh 11	Scot
NUCLEAR ENTERPRISES LTD.		
Adv Pg 194	550 Berry St. Winnipeg 21	Man
NUCLEAR MEASUREMENTS CORP.,		
Adv Pg 237	2460 N Arlington Ave. Indianapolis 18	Ind
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 187	Eindhoven	Neth
PHYSICAL SCIENCES CORP. Adv Pg 38	189 N Fair Oaks Ave. Pasadena	Cal
Plowey Nucleonics Ltd.	Wooden Rd, Northampton, England	
Rochester Instrument Systems Inc.	276 N Union St, Rochester 6	NY
Siemens & Halske AG	Rheinstrasse 20, Karlsruhe	Ger
SOCIETE RATEAU, Adv Pg 113-T	Rue Rateau Le Commerce, Seine	Fr
Special Instrument Laboratory, Inc	302 W Vine Ave, Knoxville 08	Tenn
Standard Tel. & Cables Ltd.	29 Glasshouse Yd, London EC 1	Eng
SYSTEMS ENGINEERING LAB. INC.		
Adv Pg 198	Box 9140, Fort Lauderdale	Fla
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 113-C	240 W 17th St. New York 11	NY
THOMSON-HOUSTON (CIE. FRANCAISE),		
Adv Pg 113-D	173 Blvd. Haussmann, Paris 8	Fr
TRACERLAB, INC. Adv. Pgs. 124, 113-S	1601 Trapelo Rd. Waltham 54	Mass
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. SECT.		
Adv. Pgs. 70, 71	Pittsburgh	Pa

REACTOR PRESSURE VESSELS
See VESSELS—PRESSURE, REACTOR

REACTOR SIMULATORS
See SIMULATORS—REACTOR
SERV. & CONS'LT: SIMULATORS, REACTOR & POWER—DESIGN

REACTORS—NUCLEAR
See Also POWER PLANTS—NUCLEAR
SERV. & CONS'LT: REACTOR DESIGN
A – DESIGNER
B – CONSTRUCTOR
AB – BOTH
1. CRITICAL ASSEMBLIES
2. ISOTOPE-PRODUCTION
3. MATERIALS-TESTING
4. POWER
5. PROCESS & SPACE-HEAT
6. PROPULSION
7. PULSED
8. RESEARCH
9. TRAINING

AEG, 1A-4AB-6A-8AB-9AB,		
Adv Pg 112-A	Nuetheuer, Frankfurt/Main, Germany	
AMF ATOMICS, 1AB-2AB-3AB-4A-5A, 6A-7AB-8AB-9AB, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
Advanced Technology Labs. 1A-2AB-3A-4AB-5AB-6AB-7AB-8AB-9AB	300 Whisman Rd. Mountain View	Cal
Aerojet-General Nucleonics, 1-2-3-4-5-6-7-8-9	Box 77, San Ramon	Cal
Alco Products, Inc. 1AB-4AB-8AB	Box 1005, Schenectady 5	NY
Allied Research Associates, Inc. 8	43 Leon St, Boston 15	Mass
ALLIS-CHALMERS MFG. CO. 1-2-3-4-5-6-7-8-9,		
Adv. Pgs. 109-111	900 S 70th St. Milwaukee	Wis
Alsthom, Nuclear Div. 4AB-8AB	38 Ave. Kleber, Paris 16, France	
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, 4AB-8AB-9AB,		
Adv Pg 112-D	Charleroi	Belg
Atomics International Div. NAA Inc. 1-2-3-4-5-6-7-8-9	Box 309, Canoga Park	Cal
AUTOCLAVE ENGINEERS, INC., 2AB-8AB,		
Adv Pg 209	2929 W 22nd St. Erie	Pa
Anti-Aware, 9	11 rue de la Pepiniere, Paris 8e	Fr
BABCOCK & WILCOX CO. 1AB-2AB-4AB-5AB-6AB-8AB-9AB,		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Babcock & Wilcox Ltd. 4-5-6-7-8-9,	209 Euston Rd. London NW 1	Eng
Bechtel Corp. 2AB-4AB-5AB-7AB	220 Bush St, San Francisco 4	Cal
BELGONUCLEAIRE, 1AB-2-3-4AB-5AB-7AB-8AB-9AB,		
Adv Pg 112-L	35 rue des Colonies, Brussels 1	Belg
Bendix Corp. Research Labs. Div. 8-9	Southfield	Mich
Burns & Roe, Inc. 1-2-3-4-5-6-7-8-9	[illegible] Broadway, New York 13	NY
Canadian General Electric Co Ltd., 4-5-6	107 Park St, Peterborough, Ont.	Can
Canadian Westinghouse Co. Ltd. 1AB-2AB-3AB-4AB-5AB-6AB-8AB	Box 510, Hamilton, Ontario, Canada	
Cazenave, 1AB-2AB	17 Bvd. de la Libération, St. Denis, Seine	Fr
Combustion Engineering, Inc. 1-2-3-4-5-6-7-8-9	200 Madison Ave. New York 16	NY
Consolidated Western Steel Div. U. S. Steel Corp. 2-4-6	Box 5105, Tom. Annex, LA 54	Cal
CONTROLS FOR RADIATION, INC. 8-9	130 Alewife Brook Pkwy. Cambridge 40	Mass
Curtiss-Wright Corp. Princeton Div. 1AB-2AB-4AB-5AB	Box 110, Princeton	NJ
Dilworth, Secord, Meagher & Assoc. Ltd. 4A-8A	4814 Dundas St. W, Toronto, Ont.	Can
Dynatech Corp. 2-6	600 Massachusetts Ave. Cambridge 39	Mass
Elsaco Services Inc. 1AB-2AB-3AB-4AB-5AB-6A-8AB	2 Rector St, New York 6	NY
Falk & Co. Ltd., M. 9	Sandoe House, Brigstle Surrey	Eng
Ferguson Co. H. E., 2-4-5-8-9	1783 E 11th St. at Walnut, Cleve 14	Ohio
Fuji Electric Mfg. Co Ltd 1-2-3-4-5-6-8-9	2-8 Mamouchi, Chiyoda-ku, Tokyo	Jap
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. 1AB-2AB-3AB-4AB-5AB-6AB-7AB-8AB-9AB, Adv Pg 202	Box 608, San Diego 12	Cal
GENERAL ELECTRIC CO. APPARATUS SALES, 1AB-2AB-3AB-4AB-5AB-6AB-8AB-9AB,		
Adv. Pgs. 11, 12	1 River Rd. Schenectady 5	NY
General Electric Co. Ltd. of England, 2AB-4AB-5AB-6AB-8AB-9AB	Erith, Kent, England	
General Nuclear Engineering Corp. 4A-6A-7A-8A-9A	Box 845, Dunedin	Fla
Hitachi, Ltd. 1AB-4AB-6AB-8AB-9AB	1-4-chome Marunouchi, Chiyoda-ku, Tokyo	Jap

HUGHES AIRCRAFT CO. NUCLEONICS LAB. 1, Adv Pg 203	Box 2097, Fullerton	Cal
Hiller Div. Bellfiat University-Industrial, Co.	Box 691, Paoli	Wash
INDATOM, 3-4-5-9, Adv Pg 113-G	48 rue la Boetie, Paris 8e	Fr
Industrial Instrumentation Gesellschaft, 4AB-5AB-8B	Bruchsal/Karlsruhe, Postfach	Ger
INTERNUCLEAR CO. 1A-2A-3A-4A-5A-6A-7A-8AB-9AB, Adv Pg 240	7 N Brentwood Blvd. Clayton 5	Mo
ISO/SERVE INC. 2, Adv Pg 88	131 Portland St. Cambridge 39	Mass
Kohlmann, Ets, 3A-8A	25 bd de l'Amiral-Bruix, Paris 16e	Fr
Lockheed Aircraft Corp. 1AB-2AB-3AB-4AB-5AB-6AB-7AB-8AB-9AB	Box 551, Burbank	Cal
Lockheed Aircraft Corp. Georgia Div. 3A-4A-5A-6A-8AB-9AB	1360 Northside Dr. NW, Atlanta 18	Ga
MEA Research Corp. 8	Calkins	Pa
Malmber Labs Inc. 5-8	191 Mill Lane, Moonachie	NJ
Marquardt Corp., 4A-5A-8AB	16555 Saticoy St. Van Nuys	Cal
MARTIN CO. NUCLEAR DIV. 4AB-5A-6A, Adv Pg 5	Baltimore 3	Md
Mason Construction Co. Inc. 1B-2B-3B-4B-5B-7B-8B-9B	3000 Fox Hills Ave. Dayton 19	Ohio
Miles Hewitt Ltd. 7AB-8AB-9AB	Old Shoreham Rd. Shoreham-by-Sea, Sussex	Eng
NERATOM, N. V., 1B-3B-4B-6B, Adv Pg 113-F	Hoendiede 38, The Hague	Neth
Nuclear Technology Corp. 1A-2A-3A-4A-5A-6A-7A-8A-9A	86 Church St. White Plains	NY
PHILIPS GLOEILAMPENFABRIEKEN, N. V. 1-4-5-6, Adv Pg 187	Eindhoven	Neth
Pye, Ltd, 9-9	St. Andrews Rd, Cambridge	Eng
Sanborn & Porter, 4AB	72 Wall St, New York 5	NY
Siemens Schuckertwerke AG, 1AB-2AB-3AB-4AB-5AB-6AB-8AB-9AB	Werner-von-Siemens Str, 50, Erlangen	Ger
Siemensing-Gesellschaft AG 8A-9A	Simmeringer Haupstr, 39, Vienna 3	Aus
Societe Pivco-Pechiney, 3B-4B-5B-8B	340 Rue Saint-Honore, Paris 1	Fr
SOCIETE RATEAU, 1-2-3-4-5-6-8-9, Adv Pg 112-T	Rue Rateau La Courneuve, Seine	Fr
Sulzer Bros, Ltd, 4AB-5AB	Winterthur	Switz
SYLCOR DIV. SYLVANIA ELEC PRODS. INC. 1B, Adv Pg 79	Cantiague Rock Rd. Hicksville	NY
TRG, Inc, 8A	2 Aerial Way, Syosset	NY
UNITED NUCLEAR CORP. 1-2-3-4-5-6-7-8-9, Adv Pg 26	365 Rhodanter Ave, New Haven 4	Conn
Universal Nuclear Corp, 8AB	107-09 Continental Ave, Forest Hills 75	NY
Vickers Armstrong (S Marston) Ltd, 7-8-9	Swindon, Wiltshire	Eng
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT. 1AB-2A-3A-4A, Adv. Pgs. 78, 79	Box 355, Pittsburgh 30	Pa

RECOMBINERS—HYDROGEN & OXYGEN

Atomics International Div. NAA Inc.	Box 309, Canoga Park	Cal
Catalytic Combustion Corp.	4729 14th St. Detroit 6	Mich
Garrett Corp.	9851 Sepulveda Blvd, Los Angeles 45	Cal

RECORDERS

See Also CAMERAS—RECORDING
CONTROLS
COUNTERS
GAGES
METERS
SCALERS

1. GRAPHIC
2. HIGH-SPEED DIGITAL
3. LINE
4. MAGNETIC-TAPE
5. MULTICHANNEL
6. POTENTIOMETER

AEG, 3-8, Adv Pg 112-A	Hochtaus, Frankfurt/Main, Germany	
A.E.I. Ltd, 3-8	30 Grosvenor Pl. London SW1, Eng	
A. E. I. Ltd. Instrumentation Div. 6	Crown House, Aldwych, London WC2	
Advanced Technology Labs. 5	389 Wissman Rd. Mountain View	Cal
Aiken Electronic & Inspection Recording Equip. Co. 1-8	Weyhom	Mass
American Optical Co. Instrument Div. 5	Eggert & Sager Sts. Buffalo 15	NY
Amplifier Corp. of America, 4	398 Broadway, New York 13	NY
Assembly Products, Inc. 1	76 Wilson Mills Rd. Chesterland	Ohio
Astrodata, Inc. Div C W Reed Co Inc. 6	1060 E Hoover, Los Angeles 44	Cal
Avalon Electric Ltd. 2-4-6	5 Orchardon, Essex	Eng
B-I-F Industries, Div. NY Air Brake Co. 1-3-8	600-D Hanis Ave, Providence 1	RI
B & E Labs. Ltd. 1	4 Tilney St, Park Ln, London W1	Eng
BAILEY METER CO. 1-5-6, Adv Pg 69	29801 Euclid Ave, Wickliffe	Ohio
Barnes Development Co. 1	213 W Baltimore Pike, Lansdowne	Pa
Beckman Div. Beckman Instruments Inc. 5	5200 Wright Ave, Richmond	Cal
Berg-Warner Controls Div. Berg-Warner Corp. 4	3000 Newport Blvd, Santa Ana	Cal
Bristol Co. 1-6	Box 1790 HBG, Waterbury 90	Conn
Brüel & Kjær, 1-7	Linde Alle 38, Naerum, Den	
Brush Instruments Div. Clevite Corp., 1-6	37th & Perkins, Cleveland 14	Ohio
Cambridge Instrument Co. Inc. 5	400 Lexington Ave, New York 17	NY
Cambridge Instrument Co. Ltd. 1-3-5-6	13 Grosvenor Pl. London SW1	Eng
Century Electronics & Instruments, Inc. 1-6	1333 N Utica, Tulsa 10	Okla
Computer Systems Inc. 5	Culver Rd, Monmouth Junction	NJ
Consolidated Electrodynamics Corp. 1-5-6-8	300 Sierra Madre Villa, Pasadena	Cal
Curtiss-Wright Corp. Princeton Div. 1	Box 110, Princeton	NJ
D. E. S. I. Nuclear Corp. 1-4-5	Via A. Bonfoni 20, Milan	Ital
Dataprom for Industry, Inc. 1-5	4041 Fulton Pkwy, Cleveland 9	Ohio
Dr. Vieus KG	20 Rosenburgweg, Bonn	Ger
EMI Electronics Ltd. 4-5	Hayes, Middlesex	Eng
Erhardt AG, E. C. 8	Pragar. 72/III, Stuttgart-bad Cannstatt	Ger
Ediser Ind. Thomas A. Edison Div. Nuclear Edison Co. 1	40 Lakeside Ave, West Orange	NJ
Electric Instrument Corp. 1-5	60th & Upland Sts. Philadelphia 43	Pa
Electrolite Moran Co. Ltd. 6	Abbey Rd, Park Royal, NW 10, London	Eng
Electronic Associates, Inc. 1-6	Long Branch	NJ
Engelhard Industries, Inc.	113 Astor St. Newark 2	NJ
Epic, Inc. 3-5	150 Nassau St. New York 38	NY
Evcon Corp. Scientific Instrument Div. 4	16 W 46th St. New York 36	NY
Esterline-Angus Co. 1	Box 596, Indianapolis 6	Ind
Evershed & Vignoles, Ltd. Acton Lane Wks. 1	Chiswick, London W4	Eng
Fernsehgerate OHG, 1	60-72 Jahnstr. Berlin-Britz	Ger
Furness Electronics Ltd. 5-8	Paston Rd. Wythenshawe, Manchester 22, England	
Gath Cleveland Instruments Ltd. 6	Treforest, Pontypridd, Glamorgan	Wls
Fischer & Porter Co. 1-8	50 Warminster Rd. Warminster	Pa
Fluke Mfg. Co. Inc., John, 1-6	Box 7428, Seattle	Wash
FOBRO SCIENTIFIC CO. 1-5, Adv Pg 234	833 Lincoln St. Evanston	Ill
FOXBORO CO. 6, Adv Pg 180	38 Neponset Ave. Foxboro	Mass
GELMAN INSTRUMENT CO. 1, Adv Pg 233	Box 1118-H, Chelsea	Mich
General Dynamics/Astronautics, 2	Box 1128, San Diego 12	Cal
General Dynamics/Electronics, 3-6	100 Carlton Rd, Rochester 3	NY
GENERAL ELECTRIC CO. APPARATUS SALES, 1-5-6, Adv. Pgs. 11, 12	1 River Rd. Schenectady 5	NY
General Radio Co. 1	West Concord	Mass
Gordon Co., Claud S, 6	819 W 30 St, Chicago 16	Ill
Hays Corp. 3-6	Michigan City 46	Ind
Heath Co. 4-5	Benton Harbor	Mich
Honeywell Div. Minneapolis-Honeywell Reg. Co. 1-5	8000 E Evans Ave. Denver 22	Colo
Hogan Faximile Corp. Sub, Telautograph Corp. 1-5-5	805 Greenwich St, New York 14	NY
Honeywell Controls, Ltd, 1-4-5-6	Vanderhoof Ave, Toronto, Ont Canada	
Information Systems, Inc. 1-8	10131 National Blvd. LA 34	Cal
Instrument Corp. of America, 1-6	516 Glenwood Ave, Baltimore 12	Md
Ital Elettronica S.p.A. 1	Via Ignazio Pettinengo 72, Roma	Ital
Kahl Scientific Instrument Corp. 5	Box 1165, El Cajon	Cal
Kimmel Instrument Co. 1-8	2233 Grandview Ave. Columbus	Ohio
Kienzle Apparate GmbH, 1	Villingen/Schwarzwald	Ger
Leach Corp. 1-2-3-4-6	18455 Susana Rd. Compton	Cal
Leeds & Northrup Co. 1-5-6	4901 Stenton Ave, Phila 44	Pa
Leeds & Northrup Ltd., 5-6	Broad St, Birmingham 15	Eng
L'Electronique Appliquee, 6	16 rue du Docteur Finlay, Paris 15, Fr	
Lifescope Div. Gen Precision, Inc. 5-6	Glendale 1	Cal
Linton Industries, 1-2-4-5-6	336 N Foothill Rd. Beverly Hills	Cal
MINNEAPOLIS-HONEYWELL REG CO. INDS. PRODUCTS GROUP, 1-2-3-4, Adv. Pgs. 126, 240	Wayne & Windrim Avns. Phila. 44	Pa
Monitor Systems Inc. 5-6-8	Dept. 7, Ft. Wash. Ind, Pk. Ft. Wash.	Pa
Moseley Co., F. L. 1-6	409 N Fair Oaks Ave, Pasadena	Cal
Multiband Instruments Inc. 4	461 Lexington Ave, New York 17	NY
National Spectrographic Lab, Inc, 1-2-5	5300 Euclid Ave, Cleve 3	Ohio
Negretti & Zambra (Canada) Ltd, 1	4 Beverley Rd. Toronto 14	Ont
NERATOM, N. V., 1-2-3-4-5-6, Adv Pg 113-F	Hoendiede 38, The Hague	Neth
New-Linear Systems, Inc. 5	Del Mar Airport, Del Mar	Cal
NUCLEAR CHICAGO CORP. 1, Adv. Pgs. 54-57	345 E Howard Ave. Des Plaines	Ill
NUCLEAR MEASUREMENTS CORP. 1, Adv Pg 237	2460 N Arlington Ave. Indianapolis 18	Ind
Philco Corp, Govt. & Ind. Gr. 5	4700 Wissahickon Ave, Phila 44	Pa
Philips Electronic Instruments, 1-2-6	700 S Fulton Ave, Mt. Vernon	NY
Photron Instrument Co. 1-5	6616 Detroit Ave, Cleveland 2	Ohio
PHYSICAL RESEARCH CORP. 5, Adv Pg 36	209 N Fair Oaks Ave. Pasadena	Cal
Porschke & Co. oHG 8	Box 2705, Frankfurt/Main 1, Germany	
RADIATION COUNTER LABS. INC. 5, Adv. Pgs. 82, 83	5132 W Grand Av. Chicago	Ill
RADIATION EQUIP. & ACCESSORIES CORP. 1-3-4, Adv. Pg. 3rd Cover	465 Merrick Rd. Lynbrook	NY
Republic Flow Meter Co., 1	2260 Diversey Pkwy, Chicago 47	Ill
Ross Engineering, Inc. 5	A & Courtland, Philadelphia 20	Pa
Rustrak Instrument Co. 2-6	120 Silver St. Manchester	NH
Sanborn Co. 1-5	175 Wyman St, Waltham 54	Mass
Sangamo Electric Co. 1-2-4-5	11 & Converse Sts, Springfield	Ill
SEIO, 1	Via Teodosio 27, Milan	Ital
Siemens & Halske AG, 1-3-5-6	Rheinbrueckenstr. 50, Karlsruhe	Ger
Siemens-Reiniger-Werke AG, 1-3-6	Luitpoldstr. 48, Erlangen	Ger
Southern Instruments, Ltd, 6	Frimley Rd, Camberley, Surrey, England	
SYSTEMS ENGINEERING LAB. INC. 2, Adv Pg 198	Box 9148, Fort Lauderdale	Fla
Taylor Instrument Cos. 1-6	38 Ames St, Rochester 1	NY
Telecomputing Corp. 2-4-5	8125 Aero Dr. San Diego 11	Cal
Telectro Industries Corp., 2-4-6	35-16 37th St. LIC 1	NY
Telemeter Magnetics Inc. 4	Box 228, Culver City	Cal
THERMO ELECTRIC CO. INC. 4, Adv Pg 288	Saddle Brook	NJ
TOKYO SHIBAURA ELECTRIC CO. LTD. 4-6, Adv Pg 220	72 Horeko-cho 1-Chome, Chiyoda-ku, Tokyo	Jap
Varian Associates, 1-6-8	611 Hansen Way, Palo Alto	Cal
Victor Adding Machine Co. 3	3900 N Rockwell St, Chicago 18	Ill
Wagner Electric Co. 5	6600 Plymouth, St. Louis 30	Mo
WESTINGHOUSE ELEC. CORP. INSTRUMENT DEPT. 1, Adv. Pgs. 78, 79	Newark	NJ
Westronics Inc. 1-5-6	2600 McCart, Fort Worth	Tex
Yellow Springs Instrument Co. Inc. 1-6	Box 166, Yellow Springs	Ohio

RECOVERY SYSTEMS—INERT GAS

Liquid Metals, Inc.	Box 2660, Westford	Mass

RECTIFIERS—ELECTRONIC

See POWER SUPPLIES
SERV. & CONS'LT: RADIOISOTOPE & RADIATION APPLICATION

RECTIFIERS—METALLIC

See Also DIODES

A. E. I. Ltd.	30 Grosvenor Pl. London SW1, Eng	
ALLIS-CHALMERS MFG. CO., Adv. Pgs. 109-111	935 S 70th St. Milwaukee 1	Wis
Alsthom, Nuclear Div.	38, Ave. Kleber, Paris 16, France	
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, Adv Pg 112-G	Charleroi	Belg
Bradley Semiconductor Corp.	275 Walton St. New Haven	Conn
Fansteel Metallurgical Corp.	North Chicago	Ill
General Nuclear Corp.	600-6 5th Ave. New York 36	NY
International Rectifier Corp.	205 Kansas St, El Segundo	Cal
NERATOM, N. V., Adv Pg 113-F	Hoendiede 38, The Hague	Neth
Physics Research Labs, Inc.	Box 555, Hempstead	NY
Standard Tel. & Cables Ltd.	29 Glasshouse Yd, London EC 1	Eng
Syntron Co.	366 Lexington Ave, Homer City	Pa
Texas Instruments Incorporated, Transistor Div.	Box 5012, Dallas 22	Tex
Transitron Electronic Corp.	168 Albion St. Wakefield	Mass

REFRACTORIES

See Also CERAMICS

Basic, Inc.	845 Hanna Bldg, Cleveland 14	Ohio
Carborundum Co. Refractories Div.	Perth Amboy	NJ
Carborundum Co. E & D Div	New Frnts. Rt. 18G, Niagara Falls	NY
Electro Refractories & Abrasives Corp.	266 Delaware Ave. Buffalo 2	NY
Engelhard Industries, Inc.	113 Astor St. Newark 2	NJ
Ipsen Industries Inc.	Box 880, Rockford	Ill
Johns-Manville	22 E 40th St, New York 16	NY
Material Service Div. Gen. Dynamics Corp.	200 W Washington St, Chicago 6	Ill
National Beryllia Corp.	Int & Haskell Avns. Haskell	NJ
NATIONAL LEAD CO. Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
Norton Co.	1 New Bond St, Worcester 6	Mass
Taylor Sons Co., Chas.	Box 88, Cincinnati 14	Ohio

REFUELING EQUIPMENT—REACTOR

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
Aero-Flow Dynamics, Inc.	Corry	Pa
ALLIS-CHALMERS MFG. CO., Adv. Pgs. 109-111	935 S 70th St. Milwaukee	Wis
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, Adv Pg 112-G	Charleroi	Belg
BABCOCK & WILCOX CO. Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Canadian General Electric Co Ltd.	107 Park St. Peterborough, Ont.	Can
Chantilles Engrg. Wks. Ltd.	100 Rte de Lyon, Geneva	Switz
Combustion Engineering, Inc.	200 Madison Ave. New York 16	NY
Dilworth, Secord, Meagher & Assoc. Ltd.	4216 Dundas St. W, Toronto, Ont.	Can
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 609, Groton	Conn
EX-CELLO CORP. ATOMICS DIV. Adv. Pgs. 8, 9	1200 Oakman Blvd. Detroit 32	Mich
Farrel-Birmingham Co. Inc.	Ansonia	Conn
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 12	1 River Rd. Schenectady 5	NY
General Electric Co. Ltd. of England	Erith, Kent, England	
GENERAL HILLS INC. ELECTRONIC GR. AUTOMATIC HANDLING EQUIP. DEPT. Adv Pg 17	479 N 5th St. Minneapolis 1	Minn
Hitachi, Ltd.	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
Knapp Mills, Inc.	13-15 Borden Ave. LIC 1	NY
Oceanic Engineering Ltd.	Box 4815 Terminal, Toronto	Can
Radiation Products, Inc.	Pt. 40 Rd, Flushing 55	NY
Smith Corp., A. O., Atomic & Process Equip. Div.	2033 N 27 St, Milwaukee 1	Wis
Sulzer Bros, Ltd.	Winterthur	Switz
Thompson, Ltd., John	Wolverhampton, England	
United Shoe Machinery Corp, Atomic Power Dept.	Ralph St, Beverly	Mass
VARD, Adv Pg 125	2981 E Colorado, Pasadena	Cal

REGISTERS—ELECTROMECHANICAL

See COUNTERS—ELECTROMECHANICAL

REGULATORS—FEEDWATER

AEG, Adv Pg 113-A	Hochtaus, Frankfurt/Main, Germany	
BAILEY METER CO. Adv Pg 69	29801 Euclid Ave. Wickliffe	Ohio
Bailey Meter Co. Ltd.	6010 St. Catherine St. W, Montreal, Que	Can
Copes-Vulcan Div. Blaw-Knox Co.	819 W 26 St. Erie 4	Pa
Electrolite Moran Co. Ltd.	Abbey Rd, Park Royal, NW 10, London	Eng
FOSTER WHEELER CORP. Adv Pg 139	666 5th Ave. New York 19	NY
FOXBORO CO. Adv Pg 180	38 Neponset Ave. Foxboro	Mass
Republic Flow Meter Co.	2260 Diversey Pkwy. Chicago 47	Ill

Squire Co., C. E.	10608 Synecom Ave, Cleveland 10	Ohio
Watts Regulator Co.	18 Embankment St, Lawrence	Mass

REGULATORS—VOLTAGE

AEG, Adv Pg 112-A	Hochhaus, Frankfurt/Main, Germany	
A. E. I. Ltd.	33 Grosvenor Pl, London SW1	Eng
A. E. I. Ltd, Instrumentation Div.	Crown House, Aldwych, London WC2	Eng
Acme Electric Corp.	31 Water St, Cuba	NY
ALLIS-CHALMERS MFG. CO., Adv. Pgs. 109-111	931 S 70th St, Milwaukee	Wis
AMP Inc.	Eisenhower Blvd, Harrisburg	Pa
Amplifier Corp. of America	398 Broadway, New York 13	NY
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, Adv Pg 112-D	Charleroi	Belg
Avery Electric, Ltd.	5, Orlando, Essex, England	
Bendix Corp-Bendix Pacific Div.	11600 Sherman Way, N Hollywood	Cal
Bendix Corp. Red Bank Div. Electron Tube Prods.	Lumberton	NJ
CARAD CORP. Adv Pg 226	2981 Jackpoor Lane Blvd, Palo Alto	Cal
Central Transformer Co.	800 W Jackson Blvd, Chicago 7	Ill
EDGERTON, GERMESHAUSEN & GRIER, INC. Adv Pg 185	160 Brookline Ave, Boston 15	Mass
Electric Machinery Mfg. Co.	800 Central Ave, Minneapolis 13	Minn
Electronic Associates, Inc.	Long Branch	NJ
Fence Transformer Ltd.	5 Highlands Mewbar Rd, London, SW15	Eng
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
General Electric Co. Ltd. of England	Erith, Kent, England	
General Radio Co.	West Concord	Mass
Hitachi, Ltd	1-4-chome Marunouchi, Chiyoda-ku, Tokyo	Jap
International Rectifier Corp.	233 Kansas St, El Segundo	Cal
Keith Ltd., George	5 Lentill Rd, Dun Mills	Can
KEPCO INC., Adv Pg 60	131-38 Sanford Ave, Flushing 55	NY
Leach Corp.	18401 Susana Rd, Compton	Cal
National Spectrographic Lab. Inc.	6300 Euclid Ave, Cleveland 3	Ohio
Oerlikon Engineering Co.	Zurich 50, Switzerland	
Philbrick Researches Inc., George A.	127 Clarendon St, Boston 16	Mass
Raytheon Co. Voltage Regulator & Power Supply Dept.	Keeler Ave, South Norwalk	Conn
Research Inc.	Box 6166, Edina Sta, Minpls 24	Minn
S.T.A.E.R.	Via Ugo Balzani, 55, Rome	Ital
SELO	Via Teodosio 37, Milan	Ital
Sorensen Unit Raytheon Co.	Richards Ave, South Norwalk	Conn
Superior Electric Co., The	383 Middle St, Bristol	Conn
TRG, Inc	2 Aerial Way, Syosset	NY
Transistor Devices, Inc.	60 Factory St, Cedar Grove	NJ
Trott Electronics, Inc.	412 Smith St, Rochester 8	NY
Wehrenberg Co.	19000 W 8 Mile Rd, Southfield	Mich
Zenith Electric Co. Ltd.	Willian Rd, London NW 2	Eng

RELAYS

1. A-C
2. D-C
3. ELECTRONIC
4. TIME-DELAY

AEG, 1-2-3-4, Adv Pg 112-A	Hochhaus, Frankfurt/Main, Germany	
A. E. I. Ltd, 1-2-3	33 Grosvenor Pl, London SW1, Eng	
A. E. I. Ltd, Instrumentation Div. 3-4	Crown House, Aldwych, London WC1	Eng
Acromag, Inc. 2-3	22615 Telegraph Rd, Detroit	Mich
Adams & Westlake Co. 1-2-4	1033 Michigan St, Elkhart	Ind
Airborne Accessories Corp. 3-4	1414 Chestnut Ave, Hillside 5	NJ
Allied Control Co. Inc. 1-2-4	2 E End Ave, New York 21	NY
ALLIS-CHALMERS MFG. CO. 1-2-3-4, Adv. Pgs. 109-111	931 S 70th St, Milwaukee 1	Wis
Alsthom, Nuclear Div., 1-2-4	38 Ave. Kleber, Paris 16	Fr
American Instrument Co. Inc. 3-4	8030 Georgia Ave, Silver Spring	Md
Amperite Co., Inc., 1-2-3-4	561 Broadway, New York 13	NY
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, 1-2, Adv Pg 112-D	Charleroi	Belg
Automatic Electric Sales Corp. 1-2-4	Northlake	Ill
Automatic Switch Co. 1-2-3-4	50M Hanover Rd, Florham Park	NJ
Avery Electric, Ltd. 4	5 Orlando, Essex	Eng
B/W Controller Corp. 1-2	2200 E Maple Rd, Birmingham	Mich
Bell Telephone Mfg. Co., 1-3	33 Berkenrode, Hoboken/Antwerp	Belg
Bennos Corp. 1-2-4	41 S Jefferson Rd, Whippany	NJ
Bristol Co. 1	Box 1790 BBC, Waterbury 90	Conn
Clark Controller Co. 1-2-3-4	1146 E 152 St, Cleveland 10	Ohio
Comelli Dobilio Electronica Div. Fal. Fac. Elec. Co. 1-2-3-4	50 Paris St, Newark 1	NJ
Couch Ordnance Inc. Relay Div. 2	3 Arlington St, N Quincy 71	Mass
Cutler-Hammer, Inc. 1-2-3-4	432 N 12th St, Milwaukee 1	Wis
Ensco, Inc, 3	2701 N Broad St, Phila 32	Pa
Fleet Electronics Corp. 1-2-3-4	219-05 Jamaica Ave, Queens Village 28	NY
Filmer Ind. Thomas A. Inst. Div. McGraw Edison Co. 4	46 Lakeside Ave, West Orange	NJ
Electricite Mon Sin d', 1-2-3-4	11 rue Petit, Clichy Seine	Fr
Furnas Electric Products Co. Inc. 3-4	1000 Washington St, Newton Lower Falls	Mass
General Automatic Corp. 1-2-3-4	111 33rd St, Union City	NJ
General Controls Co. 4	801 Allen Ave, Glendale 1	Cal
General Dynamics/Electronics, 3	180 Carlton Rd, Rochester 3	NY
GENERAL ELECTRIC CO. APPARATUS SALES, 1-2-3-4, Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
General Electric Co Ltd of England 1-2-4	Erith, Kent, England	
H-B Instrument Co. 3	American & Bristol Sts, Philadelphia 40	Pa
Hayden Co., A. W. 4	586 N Elm St, Waterbury	Conn
Hazeltine Electric Co. 1-2-4	Box 198, Tuckerton	NJ
Hendry Relays Ltd, 1-2-4	370 Bath Rd, Slough, Bucks, England	
Hitachi, Ltd, 1-4	1-4-chome Marunouchi, Chiyoda-ku, Tokyo	Jap
Honeywell Controls, Ltd, 1-3	Vandenhof Ave, Toronto, Ont Canada	
Hydro Aire Co. Div. Crane Co. 4	3000 Winona Ave, Burbank	Cal
Industrial Timer Corp. 1-2-3-4	1407 McCarter Hwy, Newark 4	NJ
INTERTECHNIQUE S.A, 4, Adv Pg 112-B	61 rue Escudier, Boulogne/Billancourt, Seine	Fr
Iron Fireman Mfg. Co. Electronics Div. 1-3	3200 S E 9th Ave, Portland 2	Ore
Jennings Radio Mfg. Corp. 1-2	970 McLaughlin Ave, San Jose 8	Cal
Jordan Controls Inc. 3	5555 W Hampton Ave, Milwaukee 9	Wis
K-P Products, Inc. 1-2-3	5100 E 43rd Ave, Denver	Colo
Kahl Scientific Instrument Corp. 1-3-4	Box 1148, El Cajon	Cal
KEITHLEY INSTRUMENTS, INC. 2, Adv Pg 194	12415 Euclid Ave, Cleveland 6	Ohio
LAMB-AIR INC. SUB. DYNALECTRON INC. 1-2-3-4, Adv Pg 204	7444 W Wilson Ave, Chicago 31	Ill
Leach Corp. 1-2-3-4	18401 Susana Rd, Compton	Cal
Leder, Inc. 3	122 Webster, Dayton 2	Ohio
Magnini S.p.A. 1-2-4	Via L. Magnini 7, Bergamo	Italy
MINN-HONEYWELL REG CO. IND. PRODS GROUP, 2, Adv. Pgs. 126, 240	Wayne & Windrim Aves, Phila. 44	Pa
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), 2-3, Adv. Pgs. 217, 219, 221	1300 Wayne St, Apollo	Pa
Oerlikon Engineering Co. 1-2-4	Zurich 50, Switzerland	
Okonite Mfg. Co. 1-3	3691 Howard St, Skokie	Ill
Philco Corp, Govt. & Ind. Gr. 1-2-3-4	4700 Wissinoming Ave, Phila 44	Pa
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. 1-4, Adv Pg 187	Eindhoven	Neth
Photobell Co, Inc. 2-4	12 E 22 St, New York 10	NY
Pollak Corp., Joseph, 1-2-3-4	181 Prospect St, Boston 23	Mass
Potter & Brumfield Div. AMF, 1-2-3	Princeton	Ind
Price Electric Corp. 1-2-4	E Second & Church Sts, Frederick	Md
RBM Controls Div. Essex Wire Corp. 1-2-3-4	131 Godfrey St, Logansport	Ind
RADIATION TECHNOLOGY, INC. 2, Adv. Pg. 3rd Cover	457 Jackson St, NW, Atlanta 18	Ga
Raytheon Co. Ind. Comps. Div. 3	55 Chapel St, Newton	Mass
Robinson & Co. Ltd., D. 1-2-4	5 & 7 Church Rd, Richmond, Surrey	Eng
Simmonds Ltd., L. E. 1-2-4	Byron Rd, Harrow, Middx	Eng
Simpson Electric Co. Div. Assoc. Gage & Mach Co. 1-2-3-4	5218 W Kinzie St, Chicago 44	Ill
Standard Tel. & Cables Ltd. 1-2-3-4	59 Glasshouse Yd, London EC 1	Eng
Sterner-Arnold, Inc. 3	7 Elkins St, So. Boston 27	Mass
TRG, Inc, 1-2-3-4	2 Aerial Way, Syosset	NY
Telecomputing Corp. 3	8125 Aero Dr, San Diego 11	Cal
Telecro Industries Corp., 3	35-15 37th St, Long Island City 1	NY
TOKYO SHIBAURA ELECTRIC CO. LTD. 1-2, Adv Pg 223	12 Tsunko-cho 1-Chome, Chiyoda-ku, Tokyo	Jap
Torwico Electronics, Inc. 3	Box 70, Lakewood	NJ
Trott Electronics, Inc. 3-4	412 Smith St, Rochester 8	NY
Unaset Co. George, 4	413 Market St, Newark 5	NJ
Ulmer Co., H. W. 4	3941 San Luis Rey Rd, Oceanside	Cal
Venner Electronics Ltd. 2-3-4	Kingston By-Pass, New Malden, Surrey	Eng
VICTOREEN INSTRUMENT CO. 3-4, Adv. Pg. 4th Cover	5806-11 Hough Ave, Cleveland 3	Ohio
Wheelock Signals, Inc. 1-2	273 Branchport Ave, Long Branch	NJ
Wilson & Co., G. C. 4	1026 30th St, Huntington	W Va

REMOTE CONTROL SYSTEMS & COMPONENTS

1. ELECTRICAL
2. HYDRAULIC
3. MECHANICAL
4. PNEUMATIC

AMF ATOMICS, 1-2-3-4, Adv. Pgs. 76, 77, 79	140 Greenwich Ave, Greenwich	Conn
Aero-Flow Dynamics, Inc., 4	Cory	Pa
Aerojet Solfuelite Inc. Control Equip. Div. 1-2-3	Comly Ave, Greenwich	Conn
Aerojet Dir Aerojet-General Corp. 1-2-3-4	410 N Citrus Ave, Covina	Cal
ALLIS-CHALMERS MFG. CO. 2, Adv. Pgs. 109-111	931 S 70th St, Milwaukee	Wis
Applied Research (Instruments) Ltd, 1	Lonsdale House, Reigate	Eng
Armstrong Whitworth Equipment, 3	Hawksworth, Gloucester	Eng
Automatic Electric Sales Corp. 1	Northlake	Ill
Automotive & Aircraft Div. Atwr. Chain Chain & Cable Co. Inc. 3	601 Stephenson Bldg, Detroit	Mich
Avery Electric, Ltd. 1	5 Orlando, Essex	Eng
B/W Controller Corp. 1	2200 E Maple Rd, Birmingham	Mich
BAILEY METER CO. 1-4, Adv Pg 69	29801 Euclid Ave, Wickliffe	Ohio
Barkley & Dexter Labs. Inc. 1-3	20 Franklin St, Fitchburg	Mass
Barnes & Reinecke, Inc. 1-2-3-4	230 E Ohio St, Chicago 11	Ill
Bell Telephone Mfg. Co., 1	33 Berkenrode, Hoboken/Antwerp	Belg
Belock Instrument Corp. 1-3	112-02 14th Ave, College Point 56	NY
Bendix Corp. Eclipse Pioneer Div. 1	Teterboro	NJ
Bristol Co. 1-4	Box 1790 BBC, Waterbury 90	Conn
CHANDLER EVANS CORP. 1-2-4 Adv Pg 139	Charter Oak Blvd, West Hartford	Conn
Clark Controller Co. 1	1146 E 152nd St, Cleveland 10	Ohio
Comflow Corp. 4	2100 Arch St, Philadelphia 3	Pa
Consolidated Controls Corp. 3	14 Durant Ave, Bethel	Conn
Cooper-Vulcan Div. Stow-Knox Co. 1-4	609 W 26 St, Erie 4	Pa
Cutler-Hammer, Inc, 1	432 N 12th St, Milwaukee 1	Wis
Dynex Corp. 1	1307 S Myrtle Ave, Monrovia	Cal
Daystrom Inc. Control Systems Div. 1	4600 Whitman Rd, La Mirada	Cal
Dilworth, Secord, Meagher & Assoc. Ltd. 1-2-3	4814 Dundas St. W, Toronto, Ont.	Can
Eckardt AG, E. C. 4	Pragier, 75/PIE, Stuttgart-Ind Comment	Ger
EDGERTON, GERMESHAUSEN & GRIER, INC. 1, Adv Pg 185	160 Brookline Ave, Boston 15	Mass
Electric Boat Div. Gen. Dynamics Corp. 1-2-3-4	Industrial Services Dept. 000, Groton	Conn
Electricite Mon Sin d', 1	11 rue Petit, Clichy Seine	Fr
Electronic Memos Co. Ltd. 1-2-4	Abbey Rd, Park Royal, NW10, London	Eng
Evershed & Vignoles, Ltd. Atma Lane Wks, 1-4	Chiswick, London W4	Eng
EX-CELLO CORP. ATOMICS DIV. 1-2-3-4, Adv. Pgs. 8, 9	1200 Oakman Blvd, Detroit 32	Mich
FMC Corp. Ordnance Div. 1-2-3-4	Box 367, San Jose 8	Cal
Fischbach & Moore, 1-2-3-4	Box 7788, Dallas 26	Tex
Forges & Ateliers de Cons. Electriques de Jeumont, 1	5 pl. Rio-de-Janeiro, Paris 8e	Fr
FOXBORO CO. 4, Adv Pg 180	38 Neponset Ave, Foxboro	Mass
Garnet Corp. 1-3	9851 Sepulveda Blvd, Los Angeles 45	Cal
GENERAL ELECTRIC CO. APPARATUS SALES, 1, Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
General Regulator Corp. 1-2-4	884 5th Ave, New York 19	NY
H-B Instrument Co. 1	American & Bristol Sts, Philadelphia 40	Pa
Hanna Engineering Works, 2-4	1765 Elston Ave, Chicago 22	Ill
Hastings-Raydist Inc. 1	Newcomb Ave, Hampton	Va
Hayden Co., A. W. 1	586 N Elm St, Waterbury	Conn
HUGHES AIRCRAFT CO. NUCLEONICS LAB. 1-2-3-4, Adv Pg 203	Box 2097, Fullerton	Cal
Hydro Aire Co. Div. Crane Co. 2-4	3000 Winona Ave, Burbank	Cal
Jordan Controls Inc. 1	5555 W Hampton Ave, Milwaukee 9	Wis
KEARFOTT DIV. GEN. PRECISION, INC. 1, Adv Pg 201	1150 McBride Ave, Little Falls	NJ
Kenlectro Hydraulics Ltd. 3	Alleslay, Coventry, Warwickshire	Eng
L I Products, 1	7466 Girard Ave, La Jolla	Cal
Leder, Inc. 1-4	122 Webster, Dayton 2	Ohio
Leach & Worthop Ltd., 1-4	Broad St, Birmingham 15	Eng
M. Tex Beach, Inc., 1	90 Wheeler Ave, Pleasantville	NY
Magnini S.p.A. 1	Via L. Magnini 7, Bergamo	Italy
Marquardt Systems Inc. 1	Dept. 7, Ft. Wash. Ind. Pk. Ft. Wash.	Pa
Minneck Inc. Sub. Model Eng. & Mfg. Co. 1	4875 S State St, Salt Lake City	Utah
Nagscott & Zumbro (Canada) Ltd. 4	4 Bermondsey Rd, Toronto 14	Ont
New York Air Brake Co	230 Park Ave, New York 17	NY
Oerlikon Engineering Co., 2	Zurich 50	Switz
Parker Aircraft Co. 1-2-3-4	5487 W Century Blvd, Los Angeles 45	Cal
Perkin-Elmer Corp. Electro-Optical Div. 1-2-3	6670 E Washington Blvd, L A 22	Cal
Photobell Co. Inc. 1	12 E 22 St, New York 10	NY
Republic Flow Meter Co., 1-4	2200 Diversey Pkwy, Chicago 47	Ill
Robinson & Co. Ltd., D. 1	5 & 7 Church Rd, Richmond, Surrey	Eng
Rochester Instrument Systems Inc. 1	276 N Union St, Rochester 5	NY
S. O. M., 2	256 Ad Douvar, Paris 20	Fr
S.T.A.E.R. 1	Via Ugo Balzani, 55, Rome	Ital
Salem-Brosius Inc., 2-3	Box 2222, Pittsburgh 30	Pa
SCIENTIFIC-ATLANTA, INC. 1-3, Adv Pg 186	2162 Piedmont Rd, Atlanta	Ga
Siemens & Halske AG, 1	Rheinbrueckenstr. 50, Karlsruhe	Ger
Simmonds Precision Products Inc. 3	186 White Plains Rd, Tarrytown	NY
Sperry Phoenix Co. Div. Sperry Rand Corp. 1-3	21111 N 19th Ave, Phoenix	Ariz
Standard Tel. & Cables Ltd. 1	59 Glasshouse Yd, London EC 1	Eng
STEWART CORP., F. W. 3, Adv Pg 227	4311 Beaucatel Ave, Chicago 13	Ill
STOW MFG. CO. 3, Adv Pg 217	355 Bear St, Binghamton	NY
Superior Electric Co., The, 1	383 Middle St, Bristol	Conn
Taylor Instrument Co. 1-4	38 Agnes St, Rochester 1	NY
Telecomputing Corp. 2-3-4	8125 Aero Dr, San Diego 11	Cal
TELEPLEX INC. 1-2-3-4, Adv Pg 240	Church Rd, North Wales	Pa
TOKYO SHIBAURA ELECTRIC CO. LTD. 1-2, Adv Pg 223	12 Tsunko-cho 1-Chome, Chiyoda-ku, Tokyo	Jap
United Control Systems, Inc. 1-2-3	918 Woodley Rd, Dayton 3	Ohio
United Elec Machinery Corp. Atomic Power Dept. 1-2-3-4	Balch St, Beverly	Mass
U. S. Controls, Inc, 1-4	410 Fourth Ave, Brooklyn 15	NY
Vacuum Research (Cambridge) Ltd. 4	Quayside, Bridge St, Cambridge	Eng
Vickers Armstrong (S Marston) Ltd, 1	Swindon, Wiltshire	Eng
Wagner Electric Co. 2-4	6400 Plymouth, St. Louis 23	Mo
Weinlor Instruments Corp. 2	196 E Merrick Rd, Freeport	NY

REMOTE-HANDLING DEVICES

See Also MANIPULATORS—REMOTE TONGS—HANDLING

AMF ATOMICS, Adv. Pgs. 76, 77, 79	140 Greenwich Ave, Greenwich	Conn
Aerojet-General Corp.	13324 W Exposition Blvd, L A 66	Cal
Aerojet Dir Aerojet-General Corp	410 N Citrus Ave, Covina	Cal
ALLIED ENGINEERING & PRODUCTION CORP., Adv Pg 242	2421 Blending Ave, Alameda	Cal
AMERAY CORP., Adv Pg 172	Route 46, Kenvil	NJ
Anderson-Barrow Corp	111 W Jewel Ave, St. Louis 22	Mo
ATOMIC ACCESSORIES, INC., Adv Pg 286	811 W Merrick Rd, Valley Stream	NY
Barkley & Dexter Labs. Inc.	20 Franklin St, Fitchburg	Mass
Barnes Co., W. F. & John	1451 E Warren St, Rockford	Ill
Barnes & Reinecke, Inc.	230 E Ohio St, Chicago 11	Ill
Bristol Co.	Box 1790 BBC, Waterbury 90	Conn
British Electrical Repairs Ltd.	30 Chadwick St, Manchester 1	Eng
Cayuga Machine & Fabricating Co. Inc.	200 W Cornell Ave, Depew	NY
Consolidated Controls Corp.	14 Durant Ave, Bethel	Conn
D. I. S. I. Nuclear Corp.	Via A. Bertoni 30, Milan	Ital
DIAMOND POWER SPECIALTY CORP. Adv Pg 1	Box 415, Lancaster	Ohio
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
Electricite Mon Sin d'	11 rue Petit, Clichy Seine	Fr
EX-CELLO CORP. ATOMICS DIV. Adv. Pgs. 8, 9	1200 Oakman Blvd, Detroit 32	Mich

FMC Corp. Ordnance Div.	Box 501, San Jose 3	Cal
Fuesel-Birmingham Co. Inc.	Ansonia	Conn
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
HUGHES AIRCRAFT CO. NUCLEONICS LAB.		
Adv Pg 203	Box 2097, Fullerton	Cal
Isotopes Specialties Co.	Box 688, Burbank	Cal
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lockheed Aircraft Corp. Georgia Div.	1500 Northside Dr. NW, Atlanta 18	Ga
NUCLEAR ENTERPRISES LTD.		
Adv Pg 194	550 Berry St. Winnipeg 21	Man
Nuclear Research Applications Ltd.	Bell St, Reigate, Surrey, England	
Ohio Nuclear Inc.	27106 Knickerbocker Rd. Cleve 40	Ohio
Paramitor Ltd.	5A Princes St, Hanover Sq, London W1	Eng
Perkin-Elmer Corp. Electro-Optical Div.	5670 E Washington Blvd. L A 22	Cal
Philips Electronic Instruments	750 S Fulton Ave. Mt. Vernon	NY
Pye, Ltd	St. Andrews Rd, Cambridge	Eng
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	663 Merrick Rd. Lynbrook	NY
Radiation Products, Inc.	Ft. 40 Rd, Flushing 53	NY
Research Equipment Co.	608 Sunnyside, Wheaton	Ill
S. O. M.	155 bd Davout, Paris 20	Fr
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Tennant Co., G. H.	701 N Lilac Dr, Minneapolis 22	Minn
TRACERLAB, INC. Adv. Pgs. 124, 113-5	1601 Trapelo Rd. Waltham 54	Mass
United Control Systems, Inc.	918 WonDley Rd. Dayton 3	Ohio
United Shoe Machinery Corp. Atomic Power Dept.	Balch St. Beverly	Mass
U. S. NUCLEAR CORP., Adv Pg 127	801 N Lake St. Box 2022, Burbank	Cal
Vickers Armstrong (S Marston) Ltd.	Swindon, Wiltshire	Eng

RESINS—ION-EXCHANGE
See Also **ION-EXCHANGE EQUIPMENT**

Baker Chemical Co., J. T.	Phillipsburg	NJ
Bio-Rad Laboratories	1237 S 32nd St, Richmond	Cal
California Corp for Biochemical Research	3826 Medford St. Los Angeles 63	Cal
Chemical Process Co.	Box 828, Redwood City	Cal
Chem-Pure Service Co.	702 Industrial Rd. San Carlos	Cal
Dow Chemical Co.	Midland	Mich
ELGIN SOFTENER CORP. Adv Pg 116	179 N Grove Ave. Elgin	Ill
Illinois Water Treatment Co.	840 Cedar St. Rockford	Ill
Nalco Chemical Co.	6216 W 66th Pl. Chicago 38	Ill
Permutit Co. Div. Pfaudler Permutit Inc.	50 W 44th St. New York 36	NY
Pumps & Softeners Ltd.	680 Waterloo St, London	Ont
Rohm & Haas Co.	Washington Sq, Philadelphia 5	Pa
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Salem-Brosius Inc.	Box 2222, Pittsburgh 30	Pa
Will Corp.	Box 1050, Rochester 8	NY

RESISTORS—ELECTRICAL

Ansonia Corp.	740 Belleville Ave. New Bedford	Mass
Allen-Bradley Co.	136 W Greenfield Ave, Milwaukee 4	Wis
Ambold Ceramics, Inc.	1 E 57th St, New York 22	NY
Ancley Electric, Ltd.	5 Ockendon, Essex	Eng
Carborundum Co. Refractories Div.	Perth Amboy	NJ
Clark Controller Co.	1146 E Hilland St, Cleveland 10	Ohio
Corning Glass Works, Shielding Radiation	Corning	NY
Dawen Co.	530 W Mt. Pleasant Ave. Livingston	NJ
DEFENSE APPAREL, Adv Pg 238	115 Allyn St. Hartford 3	Conn
Erie Resistor Corp.	644 W 12th St, Erie	Pa
Fairchild Controls Corp	225 Park Ave, Hicksville	NY
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Radio Co.	West Concord	Mass
General Resistance Inc.	430 Southern Blvd, New York 55	NY
Hallett Mfg. Co.	5710 Bowcroft St. Los Angeles 16	Cal
Mid-Eastern Electronics, Inc.	22 Commerce St. Springfield	NJ
Miles Hivolt Ltd	Old Shoreham Rd, Shoreham-by-Sea, Sussex	Eng
Okonite Mfg. Co.	2001 Howard St. Skokie	Ill
Ray-O-Vac Co. Div. Elec. Storage Battery Co.	Madison	Wis
Sam Resistor Corp.	188 Saw Mill River Rd. Yonkers	NY
Spear Carbon Co.	Thorndale, St. Marys	Pa
Spear Resistor Div. Spear Carbon Co.	Bradford	Pa
Sprague Electric Co.	Marshall St, North Adams	Mass
Stackpole Carbon Co.	St. Marys	Pa
Standard Tel. & Cables Ltd.	29 Glasshouse Yd. London EC 1	Eng
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 113-C	240 W 17th St. New York 11	NY
Texas Instruments Incorporated, Components Div.	Box 5012, Dallas 22	Tex
VICTOREEN INSTRUMENT CO.,		
Adv. Pg. 4th Cover	3000-11 Hough Ave. Cleveland 3	Ohio
Zenith Electric Co. Ltd.	Willson Rd. London NW 2	Eng

RESPIRATORS
See **MASKS—PROTECTIVE**

RHEOSTATS
See **POTENTIOMETERS**

ROLLING EQUIPMENT
See Under **FABRICATING EQUIPMENT**

SAFETY EQUIPMENT & SERVICES
See **ALARMS & ANNUNCIATORS**
CLOTHING—PROTECTIVE
DECONTAMINATING EQUIPMENT
DOSIMETERS—RADIATION
LAUNDRY EQUIPMENT
MASKS—PROTECTIVE
MONITORS—RADIATION
SERVICES & CONSULTANTS:
CRITICALITY-HAZARD EVALUATION
DECONTAMINATION
HEALTH PHYSICS
LAUNDRY
MONITORING
REACTOR-HAZARD EVALUATION
SAMPLING, AIR & WATER
SITE LOCATION
URINALYSIS
WASTE DISPOSAL
SHIELDING—RADIATION
SIGNS—WARNING, RADIATION

SAMARIUM
See **METALS, ALLOYS & COMPOUNDS**

SAMPLE CHANGERS—AUTOMATIC

Ammasmers-Bunsiss Corp	111 W Jewel Ave, St. Louis 22	Mo
Atomic Devel. & Machine Corp.	15-06 130 St, College Point 56	NY
B & E Labs. Ltd.	4 Tilney St. Park La. London W1	Eng
BAIRD-ATOMIC INC. Adv Pg 87	33 University Rd. Cambridge 38	Mass
Bell Telephone Mfg. Co.	33 Berkenrode, Hoboken/Antwerp	Belg
Beutwick Associates, Inc	138 E 53rd St, New York 22	NY
D. I. S. I. Nuclear Corp.	Via A. Bordoni 30, Milan	Ital
Equipment Atomicos Brasileiro Ltda.	Box 2924, Rio de Janeiro	Braz
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
FRIESKE & HOPPNER GMBH,		
Adv Pg 113-H	Erlangen-Bruck	Ger
General Dynamics /Fort Worth	Box 748 Fort Worth 1	Tex
General Nuclear Corp	1302 S Cypress Ave, Fullerton	Cal
INSTRUMENT & DEVELOPMENT PRODS CO.,		
Adv Pg 204	355 W 168th Pl. Chicago	Ill
Isotope Accessories Co.	5212 Westminster Ave. Philadelphia 31	Pa
ISOTOPE DEVELOPMENTS LTD,		
Adv Pg 71	Bath Rd. Beaconsfield, Reading, Berks	Eng
JOHNSON & ASSOCIATES, INC., WILLIAM B.,		
Adv Pg 226	Box 415, Mountain Lakes	NJ
Lab. Prof. Dr. R. Berthold	22 Calmbacherstr. Wildbad im Schwarzwald	Ger
L'Electronique Appliquee	25 rue du Docteur Finlay, Paris 15, Fr	
Lockheed Aircraft Corp	Box 551, Burbank	Cal
MEILLON, INC., GEORGE T.		
Adv Pg 102	132 Nassau St. New York 38	NY
NUCLEAR-CHICAGO CORP.,		
Adv. Pgs. 56-57	345 E Howard Ave. Des Plaines	Ill
NUCLEONIC CORP. OF AMERICA,		
Adv Pg 202	196 Dogrow St. Brooklyn 31	NY
PACKARD INSTRUMENT CO. INC.		
Adv. Pgs. 84, 85	Box 428, La Grange	Ill
Philips Electronic Instruments	750 S Fulton Ave. Mt. Vernon	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 187	Eindhoven	Neth
Picker X-Ray Corporation	1275 Mamaroneck Ave, White Plains	NY
Poeschke & Co. oHG	Box 2766, Frankfurt/Main 1, Germany	
RADIATION COUNTER LABS. INC.		
Adv. Pgs. 82, 83	5122 W Grove St. Skokie	Ill
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	663 Merrick Rd. Lynbrook	NY
RADIATION INSTRUMENT DEVELOPMENT LAB.		
Adv. Pgs. 216, 230A-D	61 E North Ave. Northlake	Ill
RADIATION TECHNOLOGY, INC.		
Adv. Pg. 3rd Cover.	657 Astoria St. NW, Atlanta 18	Ga
L. A. I. F.	38 Rue Gabriel Crie, Malakoff, Seine	Fr
SELO	Via Teodosio 27, Milan	Ital
SHARP LABORATORIES, INC. Adv Pg 86	Box 1382, La Jolla	Cal
Siemens & Halske AG	Rheinbrueckenstr. 50, Karlsruhe	Ger
Siemens-Reiniger-Werke AG	Laipoldstr. 65, Erlangen	Ger
TECHNICAL ASSOCIATES, Adv Pg 225	140 W Providencia Ave. Burbank	Cal
TRACERLAB, INC. Adv. Pgs. 124, 113-5	1601 Trapelo Rd. Waltham 54	Mass
Union Industrial Equipment Corp	Port Chester	NY
Water Associates	45 Franklin St, Framingham	Mass

SAMPLE CHANGERS—MANUAL

Ammasmers-Bunsiss Corp	111 W Jewel Ave, St. Louis 22	Mo
Atomic Devel. & Machine Corp.	15-06 130 St, College Point 56	NY
BAIRD-ATOMIC INC. Adv Pg 87	33 University Rd. Cambridge 38	Mass
Beutwick Associates, Inc	138 E 53rd St, New York 22	NY
D. I. S. I. Nuclear Corp.	Via A. Bordoni 30, Milan	Ital
Equipment Atomicos Brasileiro Ltda.	Box 2924, Rio de Janeiro	Braz
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
FRIESKE & HOPPNER GMBH,		
Adv Pg 113-H	Erlangen-Bruck	Ger
General Nuclear Corp	1302 S Cypress Ave, Fullerton	Cal
General Nuclear Corp.	560-4 5th Ave. New York 36	NY
INSTRUMENT & DEVELOPMENT PRODS CO.,		
Adv Pg 204	355 W 168th Pl. Chicago	Ill
Isotope Accessories Co.	5212 Westminster Ave. Philadelphia 31	Pa
JOHNSON & ASSOCIATES, INC., WILLIAM B.,		
Adv Pg 226	Box 415, Mountain Lakes	NJ
Kobe Kogyo Corp.	1-5 Wadayama-Dori, Hyogo-Ku, Kobe	Jap
LIONEL ELECTRONIC LABS.		
Adv Pg 218	1226 Flushing Ave. Brooklyn 37	NY
Lockheed Aircraft Corp	Box 551, Burbank	Cal
MEILLON, INC., GEORGE T.		
Adv Pg 102	132 Nassau St. New York 38	NY
NUCLEAR-CHICAGO CORP.,		
Adv. Pgs. 56-57	345 E Howard Ave. Des Plaines	Ill
NUCLEAR CORP OF AMERICA, INST & CON DIV,		
Adv Pg 94	2 Richwood Pl, Danville	NJ
NUCLEAR MEASUREMENTS CORP.,		
Adv Pg 237	2400 N Arlington Ave. Indpls. 18	Ind
Nuclear Research Applications Ltd.	Bell St. Reigate (Surrey)	Eng
NUCLEONIC CORP. OF AMERICA,		
Adv Pg 202	196 Dogrow St. Brooklyn 31	NY
Philips Electronic Instruments	750 S Fulton Ave, Mt. Vernon	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 187	Eindhoven	Neth
Picker X-Ray Corporation	1275 Mamaroneck Ave. White Plains	NY
Poeschke & Co. oHG	Box 2766, Frankfurt/Main 1, Germany	
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	663 Merrick Rd. Lynbrook	NY
RADIATION INSTRUMENT DEVELOPMENT LAB.		
Adv. Pgs. 216, 230A-D	61 E North Ave. Northlake	Ill
SELO	Via Teodosio 27, Milan	Ital
TECHNICAL ASSOCIATES, Adv Pg 225	140 W Providencia Ave. Burbank	Cal
TOKYO SHIBAURA ELECTRIC CO. LTD.		
Adv Pg 225	12 Yunoki-cho 1-Chome, Chiyoda-ku, Tokyo	Jap
TRACERLAB, INC. Adv. Pgs. 124, 113-5	1601 Trapelo Rd. Waltham 54	Mass
Union Industrial Equipment Corp	Port Chester	NY
VICTOREEN INSTRUMENT CO.,		
Adv. Pg. 4th Cover	3000-11 Hough Ave. Cleveland 3	Ohio
Water Associates	45 Franklin St, Framingham	Mass

SAMPLING—AIR
See **SERV. & CONS'LT: SAMPLING, AIR & WATER**

SAMPLING SYSTEMS—FLUID

Aerco Div Aerojet-General Corp	410 N Citrus Ave, Covina	Cal
Aircraft Porous Media, Inc.	Glen Cove	NY
BLAWNOX POWER SPECIALTY CORP.		
Adv Pg 7	Box 415, Lancaster	Ohio
Dynatech Corp.	529 Massachusetts Ave, Cambridge 39	Mass
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 606, Groton	Conn
FILTRONICS INC. Adv Pg 20	Box 1001 Lowell	Cal
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
Graver Water Conditioning Co.	216 W 14 St. New York 11	NY
Liquid Metals, Inc.	Box 2886, Westford	Mass
Montek Inc. Sub. Model Eng. & Mfg. Co.	4675 S State St. Salt Lake City	Utah
PACKARD INSTRUMENT CO. INC.		
Adv. Pgs. 84, 85	Box 428, La Grange	Ill
Pye & Co. Ltd., W. G.	Tech St. Cambridge	Eng
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Schmidt Instrument Co.	Box 111, San Carlos	Cal
Sampler Co. Air Sampler Div.	783 Fifth Ave, Brooklyn 32	NY
TRACERLAB, INC. Adv. Pgs. 124, 113-5	1601 Trapelo Rd. Waltham 54	Mass
Water Associates	45 Franklin St, Framingham	Mass

SAMPLING—WATER
See **SERV. & CONS'LT: SAMPLING, AIR & WATER**

SCALERS—BINARY
See Also **COUNTERS**
SCALING TUBES—DECADE

ABG, Adv Pg 113-A	Hochtaus, Frankfurt/Main, Germany	
Ammasmers-Bunsiss Corp	111 W Jewel Ave, St. Louis 22	Mo
Automation, Inc. Div. C. W. Reed Co Inc.	5800 S Hoover, Los Angeles 44	Calif
Atomic Lab Sub. Cenco	3008 Claremont Ave, Berkeley 5	Cal
Bell Telephone Mfg. Co.	33 Berkenrode, Hoboken/Antwerp	Belg
Beckman Edmund U.K. Ltd.	High Church St, New Bedford, Beds.	Eng
Berkeley Div. Beckman Instruments, Inc.	2200 Wright Ave. Richmond	Cal
COMPONENTS CORP. NUCLEAR INSTRUMENT DIV		
Adv Pg 186	186 Gaus St. Denville	NJ
Curtis Nuclear Corp.	1846 W 120th St. Gardena	Cal
D. I. S. I. Nuclear Corp.	Via A. Bordoni 30, Milan	Ital
Dr. Vinn KG	20 Rosenburgweg, Bonn	Ger
Erie Pacific Div. Erie Resistor	12802 S Weber Way, Hawthorne	Cal
FRANKLIN SYSTEMS, Adv Pg 236	3734 Hillsboro Rd. W Palm Beach	Fla
General Nuclear Corp	1302 S Cypress Ave, Fullerton	Cal
JOHNSON & ASSOCIATES, INC., WILLIAM B.,		
Adv Pg 226	Box 415, Mountain Lakes	NJ
LABORATORY ELECTROMETER CO.		
Adv Pg 210	641 Sonora Ave. Glendale 1	Cal
L'Electronique Appliquee	25 rue du Docteur Finlay, Paris 15, Fr	
LIONEL ELECTRONIC LABS.		
Adv Pg 218	1226 Flushing Ave. Brooklyn 37	NY
Nuclear Instrument Co.	10900 Madison Ave, Cleveland 2	Ohio
Miles Hivolt Ltd	Old Shoreham Rd, Shoreham-by-Sea, Sussex	Eng
NUCLEAR-CHICAGO CORP.,		
Adv. Pgs. 56-57	345 E Howard Ave. Des Plaines	Ill
Nuclear-Electronics Corp.	2005 N Broad St, Philadelphia 22	Pa
Nuclear Enterprises (GB) Ltd.	Sighthill, Edinburgh 11	Scot

NUCLEONIC CORP. OF AMERICA,
Adv Pg 202 ... 196 Degraw St. Brooklyn 31 ... NY
Paraplegics Mfg. Co Inc ... 304 York Rd. Bensenville ... Ill
Pinney Electronics Ltd. ... Wooden Rd. Northampton, England
Pernebide & Co. oHG ... Box 2706, Frankfurt/Main 1, Germany
Racal Instruments Ltd. ... Western Rd. Bracknell, Berks, England
RADIATION COUNTER LABS. INC.
Adv. Pgs. 82, 83 ... 5122 W Grove St. Skokie ... Ill
RADIATION TECHNOLOGY, INC.
Adv. Pg. 3rd Cover ... 457 Antone St. NW, Atlanta 18 ... Ga
TRACERLAB, INC. Adv. Pgs. 134, 135-6 ... 1601 Trapelo Rd. Waltham 54 ... Mass
Trent Electronics, Inc. ... 423 Smith St. Rochester 8 ... NY
U. S. NUCLEAR CORP., Adv Pg 127 ... 801 W Lake St. Box 2022, Redondo ... Cal
Uranium Instruments Co. ... Box 1191, Grand Junction ... Colo
Vendor-Rent, Inc. ... 70 Sargent St. Hartford 5 ... Conn
Vinnec Electronics Ltd. ... Kingston By-Pass, New Malden, Surrey, Eng
Walkirt Co. ... 10021 S La Cienega Blvd. LA 45 ... Cal
Wang Laboratories ... 22 Harris St. Natick ... Mass

SCALERS—DECADE
See Also COUNTERS
SCALING TUBES—DECADE

AEG, Adv Pg 113-A ... Nordstern, Frankfurt/Main, Germany
American Trimlok Corp. Sub. EECO Electronics, Ltd. ... 36-01 30th St. Long Island City 6 ... NY
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,
Adv Pg 112-D ... Charleroi ... Belg
Atomcentr-Berzelius Corp ... 111 W Jewel Ave. St. Louis 20 ... Mo
Atomotive, Inc. Div. C. W. Reed Co Inc ... 5000 S Hoover, L A 44 ... Cal
B & K Labs, Ltd. ... 4 Tilney St. Park Ln. London W1 ... Eng
BAIRD-ATOMIC INC. Adv Pg 87 ... 33 University Rd. Cambridge 38 ... Mass
Bell Telephone Mfg. Co. ... 32 Berkenrode, Hoboken/Antwerp ... Belg
Beckman Instruments U.K. Ltd. ... High Church St. New Bradwell, Bucks ... Eng
Beckrick Associates, Inc ... 150 E 52nd St. New York 22 ... NY
Bunnell Corp. Electronic Components Div. ... Box 1288, Plainfield ... NJ
Canadian Marconi Co. ... 9440 Trenton Ave. Montreal 16 ... Can
COMPONENTS CORP. NUCLEAR INSTRUMENT DIV
Adv Pg 100 ... 100 Main St. Denville ... NJ
CRONIC RADIATION LABS., INC.
Adv Pg 3rd Cover ... 1640 Bostwick Way, Bellport ... NY
Curtis Nuclear Corp. ... 1845 W 135th St. Gardena ... Cal
D. I. S. I. Nuclear Corp. ... Via A. Boccioni 30, Milan ... Ital
Dr. Vinz KG ... 20 Rosenhagenweg, Bonn ... Ger
Dynatron Radio Ltd. ... St. Peter's Rd. Parsa Plant, Maidenhead, Berks ... Eng
EBERLINE INSTRUMENT CORP.
Adv Pg 110 ... Box 279, Santa Fe ... Nm
EECO ELECTRONICS LTD. AMERICAN TRADAIR CORP.
Adv Pg 279 ... Southend-on-Sea, Essex ... Eng
ELECTRONIC ASSOCIATES, LTD.
Adv Pg 21 ... 4916 Yonge St. Willowdale, Ont. ... Can
Elsmeg Spol ... 5 Ave. Wellington, Bruxelles 18, Belgium
Engineered Electronics Co. ... 1441 E Chestnut Ave. Santa Ana ... Cal
Equipment Associates Brasileiro Ltd. ... Box 2006, Rio de Janeiro ... Braz
Erie Pacific Div. Erie Resistor ... 13300 S Weber Way, Hawthorne ... Cal
Firth Cleveland Instruments Ltd. ... Trafford, Pontypandy, Glamorgan ... Wls
FRANKLIN SYSTEMS, INC. Adv Pg 226 ... 2724 Hillsboro Rd. W Palm Beach ... Fla
FRAZAR & HANSEN LTD. Adv Pg 113-E ... 201 Clay St. San Francisco ... Cal
General Nuclear Corp ... 1500 S Cypress Ave, Fullerton ... Cal
HANNER ELECTRONICS CO. Adv Pg 212 ... Box 321, Princeton ... NJ
Hewlett-Packard Co. ... 1501 Page Mill Rd. Palo Alto ... Cal
Hydro Aim Co. Div. Cosmo Co. ... 3000 Winona Ave. Burbank ... Cal
INSTRUMENT & DEVELOPMENT PRODS CO.,
Adv Pg 204 ... 333 W 39th Pl. Chicago ... Ill
INTERTECHNIQUE S A, Adv Pg 113-G ... 87 rue Escudier, Boulogne/Billancourt, Seine ... Fr
ISOTOPE DEVELOPMENTS LTD.
Adv Pg 74 ... Bath Rd. Beenham, Reading, Berks ... Eng
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Adv Pg 108 ... 3137 Boulevard Ave. Baltimore 13 ... Md
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Lab. Prof. Dr. K. Berthold ... 75 Calmbacherstr. Wildbad im Schwarzwald ... Ger
LABSYSTEMS ELECTROMETER CO.
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L'Electronique Appliquee ... 55 rue de Docteur Finlay, Paris 15, Fr
LIBMEL ELECTRONIC LABS.
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Lockheed Aircraft Corp ... Box 551, Burbank ... Cal
Lockheed Aircraft Corp. Georgia Div. ... 1000 Northside Dr. NW, Atlanta 18 ... Ga
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Mariam Instrument Co. ... 10900 Madison Ave. Cleveland 2 ... Ohio
Miles Hivolt Ltd ... Old Horsham Rd. Horsham-by-Sea, Sussex ... Eng
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NUCLEAR-CHICAGO CORP.,
Adv. Pgs. 34-37 ... 340 E Howard Ave. Des Plaines ... Ill

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Nuclear Electronics Corp. ... 2905 N Broad St. Philadelphia 32 ... Pa
NUCLEAR ENTERPRISES LTD.,
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NUCLEAR MEASUREMENTS CORP.,
Adv Pg 237 ... 2460 N Arlington Ave. Indpls. 18 ... Ind
Nuclear Research Applications Ltd. ... Bell St. Belgium, Surrey, England
NUCLEONIC CORP. OF AMERICA,
Adv Pg 202 ... 196 Degraw St. Brooklyn 31 ... NY
PACKARD INSTRUMENT CO. INC.
Adv. Pgs. 84, 85 ... Box 428, La Grange ... Ill
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Paraplegics Mfg. Co Inc ... 304 York Rd. Bensenville ... Ill
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PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 187 ... Eindhoven ... Neth
Picker X-Ray Corporation ... 1275 Mamaroneck Ave. White Plains ... NY
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Pernebide & Co. oHG ... Box 2706, Frankfurt/Main 1, Germany
Racal Instruments Ltd. ... Western Rd. Bracknell, Berks, England
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Adv. Pgs. 82, 83 ... 5122 W Grove St. Skokie ... Ill
RADIATION EQUIP. & ACCESSORIES CORP.
Adv. Pg. 3rd Cover ... 465 Bostwick Rd. Lynbrook ... NY
RADIATION TECHNOLOGY, INC.
Adv. Pg. 3rd Cover ... 457 Antone St. NW, Atlanta 18 ... Ga
Raytheon Research ... Box 360, San Pedro ... Cal
Reactronics Europlex, Inc. ... 9422 E Indian School Rd. Phoenix 18 ... Ariz
S. A. I. P. ... 20 Rue Gabriel Crie, Malakoff, Seine ... Fr
SELO ... Via Trentino 57, Milan ... Ital
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Siemens-Reiniger-Werke AG. ... Leipziger, 45, Erlangen, Germany
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Uranium Instruments Co. ... Box 1191, Grand Junction ... Colo
Vendor-Rent, Inc. ... 70 Sargent St. Hartford 5 ... Conn
Vinnec Electronics Ltd. ... Kingston By-Pass, New Malden, Surrey, Eng
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Adv. Pg. 4th Cover ... 2000-11 Hough Ave. Cleveland 3 ... Ohio
Walkirt Co. ... 10021 S La Cienega Blvd. LA 45 ... Cal
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TUBES—ELECTRON

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Bunnell Corp. Electronic Components Div. ... Box 1288, Plainfield ... NJ
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EMI/ASI, Adv Pg 49 ... 1750 N Vine St. Hollywood 28 ... Cal
L'Electronique Appliquee ... 55 rue de Docteur Finlay, Paris 15 ... Fr
Mariam Instrument Co. ... 10900 Madison Ave. Cleveland 5 ... Ohio
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 187 ... Eindhoven ... Neth
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D. I. S. I. Nuclear Corp. ... Via A. Boccioni 30, Milan ... Ital
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Lockheed Aircraft Corp ... Box 551, Burbank ... Cal

NUCLEAR-CHICAGO CORP.,
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Nuclear Consultants Corp. ... 2042 Manchester Rd. St. Louis 10 ... Mo
NUCLEAR CORP OF AMERICA, INST & CON DIV,
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Ohio Nuclear Inc. ... 37105 Kaiserbrecher Rd. Cleve 40 ... Ohio
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Vanguard Instruments Co ... Box 346, LaGrange ... Ill

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Adv Pg 226 ... Box 478, Manasquan Lakes ... NJ
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Pasan Equipment, Ltd. 1-2-3 ... Sidmouthsqe Ind. Est. Redhill, Surr. Eng
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Adv. Pg. 3rd Cover ... 465 Bostwick Rd. Lynbrook ... NY
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Adv Pg 113-B ... 130 ave Ledru-Rollin, Paris 11e ... Fr
Research Equipment Co. 2 ... 108 Sunnyside, Wheaton ... Ill
Semi-Elements Inc. 1-2-3 ... Saxonburg Blvd. Saxonburg ... Pa

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TECHNICAL ASSOCIATES, 1, Adv Pg 225	140 W Providencia Ave, Burbank	Cal
TECHNICAL MEASUREMENT CORP. 1, Adv Pg 63	487 Washington Ave, New Haven	Conn
TERMINAL RADIO INTERNATIONAL LTD. 1-3-2, Adv Pg 113-C	349 W 17th St, New York 11	NY
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TRACERLAB, INC. 1-2, Adv. Pgs. 124, 113-I	1601 Trapelo Rd, Waltham 54	Mass
VAR-LAC-DID CHEMICAL CO. 1, Adv Pg 241	116 Broad St, New York 4	NY

SCRAM MONITORS
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SCREENS—X-RAY

du Pont de Nemours & Co. Inc., E. I.	Wilmington 98	Del
HARSHAW CHEMICAL CO. Adv Pg 89	1945 E 97th St, Cleveland 6	Ohio
Lead Fabricators, Inc.	25 Belgrove Dr, Kenny	NJ
Mitchell Radiation Products Corp.	E Washington St, Norristown	Pa
NERATOM, N. V., Adv Pg 113-F	Noordeinde 38, The Hague	Neth
Overpelt & Lommel de Corphalie SA, cie des Metaux	64 rue des Fabriques, Brussels	Belg
Picker X-Ray Corp.	25 S Broadway, White Plains	NY
St. John X-Ray Laboratory	Califon	NJ
U. S. RADIUM CORP., Adv Pg 186	Box 246, Morristown	NJ
X-Ray Dept. of General Electric Co.	4855 Electric Ave, Milwaukee	Wis

SCRUBBERS
See VACUUM CLEANERS—INDUSTRIAL

SCRUBBERS—GAS
See Also AIR-CLEANING SYSTEMS

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American Air Filter Co.	215 Central Ave, Louisville 8	Ky
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Dynatech Corp.	680 Massachusetts Ave, Cambridge 39	Mass
POWELL SYSTEM INC. Adv Pg 243	4800 East St, Elkhart	Ind
Gower Tank & Mfg. Co. Div. Union Tank Car Co.	35 E Wacker Dr, Chicago 1	Ill
Harvey & Co. (London) Ltd., G. A.	Woolwich Rd, London, SE7	Eng
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Dow Corning Corp.	Midland	Mich
Foster Co., Benjamin	4635-37 W Girard Ave, Philadelphia 31	Pa
Glidden Co.	900 Union Commerce Bldg, Cleveland 14	Ohio
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Hysol Corp.	322 Boughton Ave, Olean	NY
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Pittsburgh Plate Glass Co.	632 Fort Duquesne Blvd, Pittsburgh 22	Pa

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Allen Div. U. S. Stoneware Co.	Box 112, Orville	Ohio
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Bacon Industries, Inc.	195 Pleasant St, Watertown	Mass
Byron Jackson of Canada, Ltd.	Box 188, Sta. H, Toronto 13, Ont.	Can
BYRON JACKSON PUMPS, INC. Adv Pg 16	2300 E Vernon Ave, Los Angeles 54	Cal
Chicago Allis Mfg. Co.	133-135 N Green St, Chicago 7	Ill
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Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 606, Groton	Conn
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Felters Co.	210 South St, Boston 11	Mass
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Flight Refueling Inc.	Box 1797, Baltimore 3	Md
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HYDRODYNE CORP. Adv Pg 129	7320 Coldwater Canyon Ave, N. Hollywood	Cal
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Press Filter & Specialty Co.	5800 E Westmoreland St, Philadelphia 24	Pa
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Seaind Inc.	Warwick Industrial Pk, Providence 5	RI
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Stackpole Carbon Co.	St. Marys	Pa
Sulzer Bros. Ltd.	Winterthur	Switz
TORNGREN CO. INC., C. V. Adv Pg 209	226 Pearl St, Somerville 45	Mass
United Flexible Metallic Tubing (Canada) Ltd.	P O Box 149, Richmond Hill, Ont.	Can
WOODS GIL TOOL CO. INC., E. B. Adv Pg 297	3434 E Olympic Blvd, Los Angeles 23	Cal

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Auburn Mfg. Co.	500 Stack St, Middletown	Conn
Bacon Industries, Inc.	195 Pleasant St, Watertown	Mass
HYDRODYNE CORP. Adv Pg 129	7320 Coldwater Canyon Ave, N. Hollywood	Cal
Johns-Manville	22 E 40th St, New York 16	NY
PHYSICAL SCIENCES CORP. Adv Pg 26	309 N Fair Oaks Ave, Pasadena	Cal
Shamban & Co., W. S.	13617 Jefferson Blvd, Culver City	Cal
SOCIETE RATEAU, Adv Pg 113-T	Rue Rateau La Courneuve, Seine	Fr

SEMICONDUCTOR DEVICES
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DIODES—SEMICONDUCTOR
TRANSISTORS

SEMICONDUCTOR RADIATION DETECTORS
See COUNTERS—RADIATION

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Nooter Corp.	1404 S 3rd St, St. Louis 68	Mo
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Atomics International Div. NAA	Box 309, Canoga Park	Cal
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Dresser Research Div. Dresser Ind. Inc.	10700 Independence St, Tulsa	Okla
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General Dynamics/Convair	Box 2678, San Diego 12	Cal
General Dynamics /Fort Worth	Box 748 Fort Worth 1	Tex
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
HAZLETON-NUCLEAR SCIENCE CORP. Adv Pg 38	4862 Fabian Way, Palo Alto	Cal
HIGH VOLTAGE ENGINEERING CORP. Adv Pg 179	5 Bedford St, Burlington	Mass
Institut for Atomenergi	Box 175, Lillestrom, Kjeller	Nor
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ISO/SERVE INC., Adv Pg 88	131 Portland St, Cambridge 39	Mass
ISOTOPES INC., Adv Pg 192	132 Woodland Ave, Westwood	NJ
Isotopes Specialties Co.	Box 808, Burbank	Cal
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KAMAN NUCLEAR, Adv. Pgs. 198, 191	Gardens of the Gods Rd, Colo Springs	Colo
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lockheed Aircraft Corp. Georgia Div.	1550 Northside Dr, NW, Atlanta 18	Ga
Malmker Labs Inc	191 Mill Lane, Moonstainside	NJ
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Nuclear Consultants Corp.	9842 Manchester Rd, St. Louis 15	Mo
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 217, 219, 221	1800 Warren St, Apollo	Pa
Nuclear Metals, Inc.	Box 1028 Concord	Mass
Nuclear Research Associates, Inc.	20-16 Bonnie Pl, Fair, LIC 1	NY
Nuclear Science & Engineering Corp.	Box 10001, Pittsburgh 36	Pa
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Quantum, Inc	Lafferty Ave, Wallingford	Conn
RADIATION COUNTER LABS. INC. Adv. Pgs. 82, 83	5122 W Grove St, Skokie	Ill
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TELEPLEX INC. Adv Pg 243	Church Rd, North Wales	Pa
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Tracerlab Reactor Monitoring Center	2030 Wright Ave, Richmond	Cal
U. S. NUCLEAR CORP., Adv Pg 137	801 N Lake St, Box 2022, Burbank	Cal
WESTINGHOUSE TESTING REACTOR, Adv. Pgs. 195 & 70, 71	Box 1075, Pittsburgh 30	Pa

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Gamma Industries, Inc.	Box 2363, Baton Rouge	La
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. Adv Pg 202	Box 608, San Diego 12	Cal
General Dynamics /Fort Worth	Box 748 Fort Worth 1	Tex
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
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HAZLETON-NUCLEAR SCIENCE CORP. Adv Pg 38	4862 Fabian Way, Palo Alto	Cal
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KAMAN AIRCRAFT CORP. TEXAS DIV-NUCLEAR DIV., Adv Pg 215	Box 9431, Austin 17	Tex
N.A.A., Adv Pg 59	Box 752, State College	Pa
Nuclear Consultants Corp.	9842 Manchester Rd, St. Louis 15	Mo
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Nuclear Metals, Inc.	Box 1028 Concord	Mass
Nuclear Science & Engineering Corp.	Box 10001, Pittsburgh 36	Pa
NUCLEONIC CORP. OF AMERICA, Adv Pg 202	196 Dogwood St, Brooklyn 31	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 187	Eindhoven	Neth
RADIATION COUNTER LABS. INC. Adv. Pgs. 82, 83	5122 W Grove St, Skokie	Ill
Radiochemistry, Inc.	1311 W St. Catherine St, Louisville 10	Ky
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S.E.B.A.I., Adv Pg 113-J	1091 chaussee d'Alsemberg, Brussels 18	Belg
Tracerlab Reactor Monitoring Center	2030 Wright Ave, Richmond	Cal
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WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT. Adv. Pgs. 70, 71	Box 355, Pittsburgh 30	Pa
WESTINGHOUSE TESTING REACTOR, Adv. Pgs. 195 & 70, 71	Box 1075, Pittsburgh 30	Pa

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Aerojet Div Aerojet-General Corp	4418 N Citrus Ave, Covina	Cal
Allbates Design & Devel, Co, Inc.	22 W Higgins St, Trenton	NJ
Alsthom, Nuclear Div.	36, Ave. Kleber, Paris 16, France	
Associates Nucleonics Inc.	975 Stewart Ave, Garden City	NY
Auxi-Atome	11 rue de la Pepiniere, Paris 8e	Fr
Bechtel Corp.	220 Bush St, San Francisco 4	Cal
Belge de Chimie Nucleaire, Sta.	36 rue des Colonies, Brussels	Belg
BELGONUCLEAIRE, Adv Pg 113-L	35 rue des Colonies, Brussels 1	Belg
Bechtel & Co. Inc., R. D.	515 Market St, San Francisco 5	Cal
Bonnard & Gardel	Ave de la Gare 16, Lausanne	Switz
Brodsky, Hopf & Adler	220 E 42nd St, New York 10	NY
Burns & Roe, Inc.	160 W Broadway, New York 13	NY
Catalytic Construction Co.	1528 Walnut St, Philadelphia 2	Pa
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
Consolidated Western Steel Div. U. S. Steel Corp.	Box 2015, Term. Ann. L A 54	Cal
Coppee, Bouton (BCEC)	102 Bd. de Waterloo, Brussels	Belg
Cummins & Barnard, Inc.	2056 S State, Ann Arbor	Mich
Day & Zimmermann, Inc.	1700 Sansom St, Philadelphia 3	Pa
Dilworth, Secord, Meagher & Assoc. Ltd	4814 Dundas St, W Toronto, Ont Canada	
Dollo & Associates, John	208 S La Salle St, Chicago 4	Ill
Dornblatt & Assoc. Inc., R. M.	836 Lafayette St, New Orleans 12	La
Ebasco Services Inc.	2 Rector St, New York 6	NY
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 606, Groton	Conn
Erbsath & Partners Ltd.	11 Grosvenor Pl, London, SW1, Eng	
Ferguson Co., H. K.	1788 E 11th St, at Walnut, Cleveland 14	Ohio
Fluor, Bacon & Davis, Inc.	2 Broadway, New York 4	NY
FOSTER WHEELER CORP. Adv Pg 130	666 5th Ave, New York 19	NY
Fraser & Co. Ltd., W. J.	Harold Hill, Romford, Essex, England	
General Dynamics /Fort Worth	Box 748 Fort Worth 1	Tex
General Nuclear Engineering Corp.	Box 3641, Tallahassee	Fla
Gilbert Associates, Inc.	525 Lancaster Ave, Reading	Pa
HUGHES AIRCRAFT CO. HUGHES LABS. Adv Pg 200	Box 90907, Fullerton	Cal
Humphreys & Glasgow Ltd.	22 Carlisle Pl, London SW1, England	
INBATON, Adv Pg 112-G	48 rue le Bastie, Paris 8e	Fr
Interatom, Internat. Atomreaktorbau GmbH	Bensberg/Koeln, Postfach	Ger
International Engineering Co. Inc.	96 New Montgomery St, San Francisco 5	Cal
INTERNUCLEAR CO., Adv Pg 248	7 N Brentwood Blvd, Clayton 5	Mo
Irvin & Partners Ltd., E. G.	118 Southwark St, London SE1	Eng
Jackson & Moreland, Inc	600 Park Square Bldg, Boston 16	Mass
KAISER ENGINEERS, Adv Pg 95	300 Lakeside Dr, Oakland 12	Cal
Kalkmann, Ing.	26 Bd de l'Amiral-Bruix, Paris 16e	Fr
Kaljian Corp.	1200 N Broad St, Philadelphia 21	Pa
Leybold Hochvakuum Anlagen	Bonner Str, 504, Koeln	Ger
Lockwood Greene Engineers, Inc.	61 E 42nd St, New York 17	NY
Loftus Corp, Peter F.	First Natl, Bank Bldg, Pittsburgh 22	Pa

Meister Lea Inc	191 Mill Lane, Mountainside	NJ
Marquardt Corp.	16555 Saticoy St, Van Nuys	Cal
Nuclo Research Laboratory	1027 Bay Rd, East Palo Alto	Cal
Nuclear Metallurgy	Milburn, Esher, Surrey, England	
Nuclear Civil Construction	22-30 Carnaby St, London W1	Eng
Pritchard & Co., J. F.	4925 Roanoke Pkwy, Kansas City	Mo
Quadron Engineers, Ltd.	812 W 8th St, L A 17	Cal
Radiation Control Inc.	6840 S Euclid Ave, Chicago 17	Ill
Robert S. Co. Associates	90 Poplar St, NW, Atlanta 3	Ga
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	22 Bd G. Clemenceau, Courbevoie, Seine	Fr
Sanderson & Porter	72 Wall St, New York 5	NY
Sargent & Lundy	140 S Dearborn St, Chicago 3	Ill
Schwartzkopf, David M.	New Canaan	Conn
Stagmaster & Breyer Inc.	100 Park Ave, New York 17	NY
Stanley Engineering Co.	Hershey Blvd, Muscatine	Iowa
STEARNS-ROGER MFG. CO. Adv Pg 22	Box 5888, Denver 17	Colo
Stone & Webster Engineering Corp.	49 Federal St, Boston 7	Mass
Sommer Sollin Co.	897 N Michigan Ave, Chicago 1	Ill
United Engineers & Constructors, Inc.	1401 Arch St, Philadelphia 5	Pa
Vitro Corp. of America	261 Madison Ave, New York 16	NY
White Engineering Corp. J. G.	80 Broad St, New York 4	NY

SERV. & CONS'LT: COMPUTER

A.E.I. Ltd.	33 Grosvenor Pl, London SW1, Eng	
AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave, Greenwich	Conn
Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Aerion Div Aerojet-General Corp	410 N Citrus Ave, Covina	Cal
Alco Products, Inc.	Box 1005, Schenectady 5	NY
Allied Research Associates, Inc.	43 Leon St, Boston 15	Mass
ASTRA, INC., Adv Pg 64	Box 238, Raleigh	NC
Atomics International Div. NAA	Box 309, Canoga Park	Cal
Atomictron Div. North American Aviation	2150 E Imperial, Downey	Cal
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Babcock & Wilcox Ltd.	209 Euston Rd, London NW 1, England	
BELGONUCLEAIRE, Adv Pg 1134	25 rue des Colonies, Brussels 1	Belg
Burns & Roe, Inc.	180 W Broadway, New York 13	NY
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
Computer Control Co. Inc.	1988 Concord St, Framingham	Mass
Computer Systems Inc.	Gulver Rd, Monmouth Junction	NJ
Control Data Corp.	501 Park Ave, Minneapolis 15	Minn
Cook Electric Co. Cook Tech Ctr.	6601 W Oakton St, Morton Grove	Ill
Dayatron Inc. Control Systems Div.	6455 Mitcher Rd, La Jolla	Cal
Designers for Industry, Inc.	4941 Fulton Pkwy, Cleveland 9	Ohio
Dynatech Corp.	639 Massachusetts Ave, Cambridge 39	Mass
Elasco Services Inc.	2 Rector St, New York 6	NY
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 600, Groton	Conn
Electronic Associates, Inc.	Long Branch	NJ
Fairbanks-Packard Electric Ltd.	Industry St, Toronto 18, Ontario, Canada	
Fischer & Porter Co.	86 Warminster Rd, Warminster	Pa
Franklin Institute Labs.	Philadelphia 3	Pa
General Applied Science Labs. Inc.	Merrick & Stewart Ave, Westbury	NY
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.		
Adv Pg 102	Box 608, San Diego 12	Cal
General Dynamics/Astronautics	Box 1128, San Diego 12	Cal
General Dynamics/Convair	Box 2672, San Diego 12	Cal
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
HPP-Singer, Inc.	Science Pk, Box 60, State College	Pa
International Engineering Co. Inc.	36 New Montgomery St, San Francisco 5	Cal
INTERNUCLEAR CO., Adv Pg 240	7 N Brentwood Blvd, Clayton 5	Mo
KAISER ENGINEERS, Adv Pg 95	300 Lakeside Dr, Oakland 12	Cal
KAMAN NUCLEAR, Adv. Pgs. 190, 191	Garden of the Gods Rd, Colo Springs	Colo
LAMS-LAB INC. KER. SYNALBETRON INC.		
Adv Pg 284	7666 W Wilson Ave, Chicago 31	Ill
Leeds & Northrup Co.	4901 Stenton Ave, Phila 44	Pa
Lidoscope Div. Gen. Precision, Inc.	Glendale 1	Cal
Litton Industries	336 N Foothill Rd, Beverly Hills	Cal
Lockheed Aircraft Corp.	Box 551, Burbank	Cal
Lockheed Aircraft Corp. Georgia Div.	1600 Northside Dr, NW, Atlanta 18	Ga
McDonnell Automation Center	Box 516, St. Louis 66	Mo
Meister Lea Inc	191 Mill Lane, Mountainside	NJ
Marquardt Corp.	16555 Saticoy St, Van Nuys	Cal
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.		
Adv Pg 2	Box 896, Attleboro	Mass
Middle West Service Co.	30 N Wacker Dr, Chicago	Ill
NORM-HONEYWELL REG CO. INDL PROD GROUP,		
Adv. Pgs. 126, 340	Wayne & Hinkle Aves, Phila. 44	Pa
Navigation Computer Corp.	Valley Forge Ind Pk, Norristown	Pa
Northern Research & Eng. Corp.	238 Main St, Cambridge	Mass
NUCLEAR UTILITY SERVICES, INC.,		
Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
Philbrick Researches, Inc., G. A.	127 Clarendon St, Boston 16	Mass
Philco Corp. Gov. & Ind. Gr.	4700 Wissahickon Ave, Phila 44	Pa
Quantum, Inc.	Lafferty Ave, Wallingford	Conn
Stagmaster & Breyer Inc.	100 Park Ave, New York 17	NY
Solartron Electronic Group Ltd.	Victoria Rd, Farnborough, Hants, Eng	
Stanley Engineering Co.	Hershey Bldg, Muscatine	Iowa
Sylvania Electronic Systems	40 Sylvan Rd, Waltham 54	Mass
SYSTEMS ENGINEERING LAB. INC.		
Adv Pg 198	Box 7148, Fort Lauderdale	Fla
TRG, Inc.	2 Aerial Way, Syosset	NY
Transcopening Corp.	6155 Aero Dr, San Diego 11	Cal
UNITED NUCLEAR CORP., Adv Pg 26	302 Winchester Ave, New Haven 4	Conn
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.		
Adv. Pgs. 70, 71	Box 355, Pittsburgh 30	Pa

SERV. & CONS'LT: CRITICAL EXPERIMENTS

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave, Greenwich	Conn
Advanced Technology Labs.	300 Whisman Rd, Mountain View	Cal
Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Aerion Div Aerojet-General Corp	410 N Citrus Ave, Covina	Cal
Alco Products, Inc.	Box 1005, Schenectady 5	NY
Allied Research Associates, Inc.	43 Leon St, Boston 15	Mass
ASTRA, INC., Adv Pg 64	Box 238, Raleigh	NC
Atomics International Div. NAA	Box 309, Canoga Park	Cal
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
BELGONUCLEAIRE, Adv Pg 1134	25 rue des Colonies, Brussels 1	Belg
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
Elasco Services Inc.	2 Rector St, New York 6	NY
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 600, Groton	Conn
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.		
Adv Pg 102	Box 608, San Diego 12	Cal
General Dynamics/Astronautics	Box 1128, San Diego 12	Cal
General Dynamics/Convair	Box 2672, San Diego 12	Cal
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lockheed Aircraft Corp. Georgia Div.	1600 Northside Dr, NW, Atlanta 18	Ga
MARTIN CO. NUCLEAR DIV. Adv Pg 3	Baltimore 3	Md
UNITED NUCLEAR CORP., Adv Pg 26	302 Winchester Ave, New Haven 4	Conn
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.		
Adv. Pgs. 70, 71	Box 355, Pittsburgh 30	Pa
WESTINGHOUSE TESTING REACTOR,		
Adv. Pgs. 195 & 70, 71	Box 1073, Pittsburgh 30	Pa

SERV. & CONS'LT: DECONTAMINATION

Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Aerion Div Aerojet-General Corp	410 N Citrus Ave, Covina	Cal
Aircraft & Missile Consultants	5782 Ambrose Ave, Manhattan Beach	Cal
Alco Products, Inc.	Box 1005, Schenectady 5	NY
American Sterilizer Co.	Box 6395, Erie	Pa
ATOMIC RESEARCH LAB. DIV. ATOMIC CORP. OF AMERICA,		
Adv Pg 104	14723 Aminta St. Panorama City	Cal
Belge de Chimie Nucleaire, Sa.	25 rue des Colonies, Brussels	Belg
Berwick Associates, Inc	150 E 42nd St, New York 35	NY
Burns & Roe, Inc.	180 W Broadway, New York 13	NY
Carbonisation Entreprise & Chantiers	8 Pl. Ste Elisabeth, 8/10, Montrouge, Seine	Fr
CONTROLS FOR RADIATION, INC.		
Adv Pg 189	130 Alewife Brook Pkwy Cambridge 40	Mass
Cook Electric Co. Cook Tech Ctr.	6601 W Oakton St, Morton Grove	Ill
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 600, Groton	Conn
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
Gamma Industries, Inc.	Box 2345, Baton Rouge	La
HAZLETON-NUCLEAR SCIENCE CORP.		
Adv Pg 38	4602 Fabian Way, Palo Alto	Cal
Innovene Industrial Uniform Rental Service	236 Parker St, Indian Orchard	Mass
Irwin & Partners Ltd., E. G.	118 Southwark St, London SE1	Eng
Isotopes Specialties Co.	Box 648, Burbank	Cal
Leybold Hochvakuum Anlagen	Bonner Str. 504, Koeln	Ger
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lockheed Aircraft Corp. Georgia Div.	1600 Northside Dr, NW, Atlanta 18	Ga
Mc Lain Sodger Associates	811 60th Pl, Downers Grove	Ill
Nuclear Consultants Corp.	1040 Manchester Rd, St. Louis 18	Mo
Nuclear Decontamination Corp	122 Warren St, Apollo	Pa
NUCLEAR ENGINEERING CO. INC.,		
Adv Pg 119	63 Bay St. Box 278, Pleasanton	Cal
Nuclear Science & Engineering Corp.	Box 10901, Pittsburgh 36	Pa
Pacific Valves, Inc.	3501 Walnut Ave, Long Beach	Cal
Radiation Control Inc.	6840 S Euclid Ave, Chicago 17	Ill
RADIOLOGICAL SERVICE CO. INC.		
Adv Pg 116	411 W Merrick Rd, Valley Stream	NY
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	22 Bd G. Clemenceau, Courbevoie, Seine	Fr
Southeastern Atomic Labs. Inc.	4220 Bay to Bay Blvd, Tampa 9	Fla
TRG, Inc	2 Aerial Way, Syosset	NY
Tracerlab Div. Thompson Ramo Wooldridge Inc.	13555 Euclid Ave, Cleveland 17	Ohio
Tracerlab Reactor Monitoring Center	2080 Wright Ave, Richmond	Cal
U. S. NUCLEAR CORP., Adv Pg 127	801 N Lake St. Box 2022, Burbank	Cal
WESTINGHOUSE ELEC. CORP. ATOMIC EQUIPMENT DEPT.		
Adv. Pgs. 18, 19 & 70, 71	Chanwich	Pa
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.		
Adv. Pgs. 70, 71	Box 355, Pittsburgh 30	Pa

SERV. & CONS'LT: DIRECT CONVERSION OF RADIOACTIVITY

Advanced Technology Labs.	300 Whisman Rd, Mountain View	Cal
Aerojet-General Nucleonics	Box 77, San Ramon	Cal
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV.,		
Adv. Pgs. 115, 231	Box 93, Ottawa, Ont	Can
Atomics International Div. NAA Inc.	Box 309, Canoga Park	Cal
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Benson Edmonds U.K. Ltd.	High Church St, New Bedford, Hants	Eng
Burns & Roe, Inc.	180 W Broadway, New York 13	NY
FRANKLIN SYSTEMS, INC. Adv Pg 236	2734 Hillsboro Rd, W Palm Beach	Fla
GENERAL ATOMIC DIV. GEN DYNAMICS CORP.		
Adv Pg 102	Box 608, San Diego 12	Cal
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
Meister Lea Inc	191 Mill Lane, Mountainside	NJ
MARTIN CO. NUCLEAR DIV. Adv Pg 5	Baltimore 3	Md
Newman Products, Inc	1007 Thos. Jefferson St NW, Wash 7	DC
Northern Research & Eng. Corp.	238 Main St. Cambridge	Mass
Nuclear Research Associates, Inc.	38-16 Bunton Pl, Ave. LIC 1	NY
NUCLEAR UTILITY SERVICES, INC.,		
Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
Philbrick-Warren-Lowe Assoc.	1055 Conn Ave, NW, Washington 6	DC
Radiochemistry, Inc	1111 W St. Catherine St, Louisville 10	Ky
ROYAL RESEARCH CORP. Adv Pg 21	11024 Dublin Blvd, Hayward	Cal
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.		
Adv. Pgs. 70, 71	Box 355, Pittsburgh 30	Pa

SERV. & CONS'LT: ELECTRONIC-SYSTEM DESIGN

Admiral Corp.	3800 W Cortland St, Chicago 47	Ill
Aerion Div Aerojet-General Corp	410 N Citrus Ave, Covina	Cal
Applied Research (Instruments) Ltd.	Emsdco House, Reigate	Eng
ASTRA, INC., Adv Pg 64	Box 238, Raleigh	NC
Atomation, Inc. Div. C. W. Reed Co Inc.	5050 S Hoover, Los Angeles 44	Cal
Atomium Corp.	242 Main St, Waltham	Mass
Avelay Electric, Ltd.	5 Ockendon, Essex	Eng
Barnes Development Co	213 W Baltimore Pike, Lansdowne	Pa
Burns & Roinache, Inc.	520 E Ohio St, Chicago 11	Ill
Benelix Corp-Benelix Pacific Div.	11800 Sherman Way, N Hollywood	Cal
Berc-Allen Applied Research, Inc.	1031 Washington Rd, Glenview	Ill
Bowmar Instrument Corp.	8000 Bluffton Rd, Fort Wayne	Ind
Brown, Ltd., S. G.	Shakespeare St, Watford, Herts	Eng
Burns & Roe, Inc.	180 W Broadway, New York 13	NY
Cayuga Machine & Fabricating Co. Inc.	900 W Gould Ave, Depew	NY
Consolidated Electrodynamics Corp.	360 Sierra Madre Villa, Pasadena	Cal
Cook Electric Co. Cook Tech Ctr.	6601 W Oakton St, Morton Grove	Ill
Cutler-Hammer, Inc.	422 N 27th St, Milwaukee 1	Wis
Dayatron Inc. Control Systems Div.	6455 Mitcher Rd. La Jolla	Cal
Elasco Services Inc.	2 Rector St, New York 6	NY
EGGERTON, GERMESHAUSEN & GRIER, INC.		
Adv Pg 180	168 Brookline Ave, Boston 15	Mass
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 600, Groton	Conn
Electronics Mem Sta d'	11 rue Petit, Clichy Seine	Fr
Fairchild Co.	7 Fairchild Ct, Pennsic	NJ
Franklin Institute Labs.	Philadelphia 3	Pa
Garrett Corp.	9851 Sepulveda Blvd, Los Angeles 45	Cal
General Applied Science Labs. Inc.	Merrick & Stewart Ave, Westbury	NY
General Dynamics/Astronautics	Box 1128, San Diego 12	Cal
General Dynamics/Convair	Box 2672, San Diego 12	Cal
General Dynamics/Electronics	100 Carlton Rd, Rochester 3	NY
General Dynamics /Fort Worth	Box 748 Fort Worth 1	Tex
General Dynamics /Pomona	Box 1911, Pomona	Cal
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
HPP-Singer, Inc.	Science Pk, Box 60, State College	Pa

1961-1962 DIRECTORY of

Hamilton Standard Div. United Aircraft Corp. ..... Bost. S, Broad Brook ..... Conn

HUGHES AIRCRAFT CO. NUCLEONICS LAB.
Adv Pg 205 ..... Box 2097, Fullerton ..... Cal
Hull Associates ..... 30 W Monroe St, Chicago 13 Ill

Instrumen. Internat. Automatisches Gmbh ..... Bensberg/Kreis, Postfach ..... Ger
Irwin & Partners Ltd., E. G. ..... 118 Southwark St, London SE1 ..... Eng
KAISER ENGINEERS, Adv Pg 95 ..... 300 Lakeside Dr, Oakland 12 ..... Cal
KARAN NUCLEAR, Adv. Pgs. 108, 191 ..... Garden of the Gods Rd, Colo Springs ..... Colo
Lamb & Hardcap Ltd. ..... Bond St, Birmingham 19 ..... Eng
Lilliscraps Div. Gen. Precision, Inc. ..... Glendale 1 ..... Cal

LIONEL ELECTRONIC LABS.
Adv Pg 210 ..... 1226 Flushing Ave, Brooklyn 37 ..... NY
Lions Industries ..... 208 N Foothill Rd, Beverly Hills ..... Cal
Lockheed Aircraft Corp. Georgia Div. ..... 1500 Northside Dr. NW, Atlanta 18 ..... Ga
M. Tec Beach, Inc. ..... 80 Wheeler Ave, Plainsville ..... NY
Malmber Lets Inc ..... 191 Mill Lane, Mountainside ..... NJ
Menlo Research Laboratory ..... 1027 Bay Rd, East Palo Alto ..... Cal
METRIX, INC. Adv Pg 30 ..... Box 232, Deerfield Ill

MINN-HONEYWELL EDS CO. NUCL PRODS GROUP.
Adv. Pgs. 138, 249 ..... Wayne & Windsor Aves. Phila. 44 ..... Pa
Morrak Inc. Lab. Model Eng. & Mfg. Co. ..... 4675 S State St, Salt Lake City ..... Utah
Navigation Computer Corp. ..... Valley Forge Ind Pk, Hatboro ..... Pa
NERATOM, N. V., Adv Pg 113-F ..... Noordeinde 38, The Hague ..... Neth

NUCLEAR CORP OF AMERICA, INST & CON DIV.
Adv Pg 94 ..... 2 Hollywood Pl, Denville ..... NJ
Omnitec Research Foundation ..... 43 Queen's Pk, Toronto 5, Ontario ..... Can
Philco Corp. Govt. & Ind. Gr. ..... 4700 Wissahickon Ave, Phila 44 ..... Pa

PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 197 ..... Eindhoven ..... Neth
Planer Ltd., G. V. ..... Windmill Rd, Sunbury-on-Thames, UMIS ..... Eng
Pye, Ltd ..... St. Andrews Rd, Cambridge ..... Eng

RCA SERVICE CO. NUCLEAR & SCIENTIFIC SERVICES,
Adv Pg 31 ..... Cherry Hill, Delaware Tp. Camden 8 ..... NJ

RADIATION TECHNOLOGY, INC.
Adv. Pg. 3rd Cover ..... 657 Antone St. NW, Atlanta 18 ..... Ga
Raymar Research ..... Box 2008, San Pedro ..... Cal
Research Inc. ..... Box 6104, Edina Sta, Minph 24 ..... Minn
Rochester Instrument Systems Inc. ..... 275 N Union St, Rochester 6 ..... NY
Rosenberg Associates, Paul ..... 100 Stevens Ave, Mt. Vernon ..... NY
S.E.R.A.L, Adv Pg 113-J ..... 1091 chaussee d'Alsemberg, Beersels 16 ..... Belg
Schultz, M. A. ..... 600 William Penn Pl, Pittsburgh 30 ..... Pa
Servomechanisms, Inc. ..... 500 N Aviation Blvd, El Segundo ..... Cal
Standard Tel. & Cables Ltd. ..... 89 Gloucester Pl, London BC 1 ..... Eng
Swanson & Mills, Inc. ..... 511 Lewis St, Dallas 7 ..... Tex
Sylvania Electronic Systems ..... 40 Sylvan Rd, Waltham 54 ..... Mass

SYSTEM ENGINEERING LAB. INC.
Adv Pg 178 ..... Box 9140, Fort Lauderdale ..... Fla
TRG, Inc ..... 2 Aerial Way, Syosset ..... NY

Tapco Div. Thompson Ramo Wooldridge Inc. ..... 23555 Euclid Ave, Cleveland 17 ..... Ohio
Telecomputing Corp. ..... 8235 Aero Dr, San Diego 11 ..... Cal
Trent Electronics, Inc. ..... 422 Smith St, Rochester 8 ..... NY
United Control Systems, Inc. ..... 918 Woodley Rd, Dayton 9 ..... Ohio
United Engineers & Constructors, Inc. ..... 1401 Arch St, Philadelphia 5 ..... Pa
Universal Match Corp, Amusement Div. ..... 475 Paul Ave, St. Louis 26 ..... Mo
Vendor-Rent, Inc. ..... 70 Sargent St, Hartford 5 ..... Conn

VICTOREEN INSTRUMENT CO.,
Adv. Pg. 4th Cover ..... 5806-11 Hough Ave, Cleveland 3 ..... Ohio

WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL GROUP, SECT.
Adv. Pgs. 70, 71 ..... Pittsburgh ..... Pa

SERV. & CONS'LT: ENCAPSULATION, RADIOACTIVE SOURCE

Admiral Corp. ..... 3800 W Cortland St, Chicago 47 Ill
AMERICAN NUCLEAR CORP. Adv Pg 198 ..... Box 438, Oak Ridge ..... Tenn
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV.,
Adv. Pgs. 7-15, 251 ..... Box 93, Ottawa, Ont ..... Can
Atomics International Div. NAA ..... Box 309, Canoga Park ..... Cal

BARTICK & WILZEE CO.
Adv. Pgs. 36, 38 ..... 161 E 42 St, New York 17 ..... NY
Bacon Industries, Inc. ..... 108 Pleasant St, Watertown ..... Mass
Bechler & Co ..... Frankfurter Str. 594, Braunschweig ..... Ger

CONTROLS FOR RADIATION, INC.
Adv Pg 189 ..... 130 Alewife Brook Pkwy Cambridge 40 ..... Mass
Cook Electric Co, Cook Tech Ctr. ..... 6601 W Oakton St, Morton Grove Ill
Flight Refueling Inc. ..... Box 1701, Baltimore 3 ..... Md
FRANKLIN SYSTEMS, INC. Adv Pg 238 ..... 2734 Hillsboro Rd, N Palm Beach ..... Fla
Gamma Industries, Inc. ..... Box 2543, Baton Rouge ..... La
General Dynamics/Convair ..... Box 2073, San Diego 12 ..... Cal
General Dynamics/Pomona ..... Box 1011, Pomona ..... Cal

GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ..... 1 River Rd, Schenectady 5 ..... NY
Grace & Co., W. R, Davison Chemical Div. ..... Erwin ..... Tenn
Instruments Inc. ..... Box 168, Tulsa ..... Okla
Irwin & Partners Ltd., E. G. ..... 118 Southwark St, London SE1 ..... Eng
Isotopes Specialties Co. ..... Box 808, Burbank ..... Cal
Lockheed Aircraft Corp ..... Box 551, Burbank ..... Cal
Lockheed Aircraft Corp. Georgia Div. ..... 1500 Northside Dr, NW, Atlanta 18 ..... Ga
Marquardt Corp. ..... 16555 Saticoy St, Van Nuys ..... Cal

NUCLEAR-CHICAGO CORP.,
Adv. Pgs. 54-57 ..... 540 E Roosevelt Ave, Des Plaines Ill
Nuclear Consultants Corp. ..... 9065 Manchester Rd, St. Louis 19 ..... Mo

NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),
Adv. Pgs. 217, 219, 221 ..... 1000 Warren St, Apollo ..... Pa
Nuclear Research Associates, Inc. ..... 10-16 Hanover Pl, Ave, LIC 1 ..... NY
Nuclear Science & Engineering Corp. ..... Box 10801, Pittsburgh 30 ..... Pa

NUCLEONIC CORP. OF AMERICA,
Adv Pg 202 ..... 196 Dupont St, Brooklyn 31 ..... NY

OAK RIDGE NATL. LAB. ISOTOPES SALES DEPT.
Adv Pg 286 ..... Box X, Oak Ridge ..... Tenn
Radiation Applications, Inc. ..... 36-40 37th St, Long Island City 1 ..... NY

RADIATION EQUIP. & ACCESSORIES CORP.
Adv. Pg. 3rd Cover ..... 665 Hertel Rd, Lyndonville ..... NY

RAHMS CHEMICAL CO. INC. Adv Pg 12 ..... 161 E 42nd St, New York 17 ..... NY

SAINT-GOBAIN NUCLEAIRE, Adv Pg 229 ..... 23 Rd G. Clemenceau, Courbevoie, Seine ..... Fr
Tracerlab Industries Corp. ..... 35-16 37th St, LIC 1 ..... NY
Torwico Electronics, Inc. ..... Box 70, Lakewood ..... NJ
TRACERLAB, INC. Adv. Pgs. 134, 113-5 ..... 1601 Trapelo Rd, Waltham 54 ..... Mass
Tracerlab Reactor Monitoring Center ..... 3030 Wright Ave, Richmond ..... Cal
UNITED NUCLEAR CORP., Adv Pg 34 ..... 383 Winchester Ave, New Haven 4 ..... Conn
U. S. NUCLEAR CORP., Adv Pg 127 ..... 801 N Lake St, Box 2022, Burbank ..... Cal
U. S. RADIUM CORP., Adv Pg 186 ..... Box 346, Morristown ..... NJ
Universal Match Corp, Amusement Div. ..... 475 Paul Ave, St. Louis 26 ..... Mo
Western Radiation Lab. ..... 1107 W 36th St, Los Angeles 7 ..... Cal

WESTINGHOUSE TESTING REACTOR,
Adv. Pgs. 195 & 79, 71 ..... Box 1075, Pittsburgh 30 ..... Pa

SERV. & CONS'LT: ENGINEER-CONSTRUCTOR

AEG, Adv Pg 113-A ..... Hanauer, Frankfurt/Main, Germany

AMF ATOMICS, Adv. Pgs. 76, 77, 99 ..... 140 Greenwich Ave, Greenwich ..... Conn
Aerojet Div Aerojet-General Corp ..... 410 N Citrus Ave, Covina ..... Cal

ALLIED ENGINEERING & PRODUCTION CORP.,
Adv Pg 242 ..... 3421 Blending Ave, Alameda ..... Cal
Atomics, Nuclear Div. ..... 96, Ave, Kleber, Paris 16, France
Associates Nucleonics Inc. ..... 275 Stewart Ave, Garden City ..... NY
Babcock & Wilcox Ltd. ..... 209 Euston Rd, London NW 1 ..... Eng
Baldwin-Lima-Hamilton Corp. ..... Dept N 8, Philadelphia 42 ..... Pa
Bechtel Corp. ..... 220 Bush St, San Francisco 4 ..... Cal
Belge de Chimie Nucleaire, Sta. ..... 38 rue des Colonies, Brussels ..... Belg
BELGONUCLEAIRE, Adv Pg 113-L ..... 35 rue des Colonies, Brussels 1 ..... Belg
Bechtel & Co. Inc., R. D. ..... 315 Market St, San Francisco 5 ..... Cal
Brown & Co., C. F. ..... Alhambra ..... Cal
Brodsky, Hopf & Adler ..... 220 E 23rd St, New York 10 ..... NY
Burns & Roe, Inc. ..... 100 W Broadway, New York 13 ..... NY
Canadian General Electric Co Ltd. ..... 107 Park St, Peterborough, Ont. ..... Can
Catalytic Construction Co. ..... 1528 Walnut St, Philadelphia 5 ..... Pa
Chicago Bridge & Iron Co. ..... 332 S Michigan Ave, Chicago 4 Ill

Consolidated Western Steel Div.
U. S. Steel Corp. ..... Box 5015, Tenn. Ann. L A 54 ..... Cal
Cummins & Barnard, Inc. ..... 2050 S State, Ann Arbor ..... Mich
Day & Zimmermann, Inc. ..... 1700 Sansom St, Philadelphia 3 ..... Pa
Dilworth, Secord, Meagher & Assoc Ltd ..... 2014 Dundas St, W Toronto, Ont Canada
Dravo Services Inc. ..... 2 Rector St, New York 6 ..... NY
Electric Boat Div. Gen. Dynamics Corp. ..... Industrial Services Dept. 606, Groton ..... Conn
Evans & Son (Portsmouth) Ltd., L.
Hampton Wks. ..... Goldsmith Ave, Portsmouth, Hants ..... Eng
Ferguson Co., H. K. ..... 1733 E 11th St, at Walnut, Cleveland 14 ..... Ohio
Ford, Bacon & Davis, Inc. ..... 2 Broadway, New York 4 ..... NY
FOSTER WHEELER CORP. Adv Pg 128 ..... 666 5th Ave, New York 19 ..... NY
Fraser & Co. Ltd., W. J. ..... Harold Hill, Romford, Essex, England
General Dynamics/Convair ..... Box 2073, San Diego 12 ..... Cal
Gilbert Associates, Inc. ..... 836 Lancaster Ave, Reading ..... Pa
Graver Tank & Mfg. Co. Div. Union Tank Car Co. ..... 35 E Wacker Dr, Chicago 1 Ill
Humphreys & Glasgow Ltd. ..... 22 Carlisle Pl, London SW1, England
IMBATOM, Adv Pg 113-G ..... 40 rue le Bastie, Paris 8e ..... Fr

Instrumen. Internat. Automatisches Gmbh ..... Bensberg/Kreis, Postfach ..... Ger
International Engineering Co. Inc. ..... 74 New Montgomery St, San Francisco 5 ..... Cal
INTERNUCLEAR CO., Adv Pg 248 ..... 7 N Brentwood Blvd, Clayton 5 ..... Mo
Jackson & Moreland, Inc ..... 600 Park Square Bldg, Boston 16 ..... Mass
Kaltenberg Bros. Co. ..... 12th & Monroe Sts, Two Rivers ..... Wis
KAISER ENGINEERS, Adv Pg 95 ..... 300 Lakeside Dr, Oakland 12 ..... Cal
Knapp Construction Co., Andrew ..... 23-15 Borden Ave, Long Island City 1 ..... NY
Knapp Mills, Inc. ..... 23-15 Borden Ave, LIC 1 ..... NY
Kulicke Corp. ..... 1300 N Broad St, Philadelphia 31 ..... Pa

LAND-AIR INC. SUB. DYNALECTRON INC.
Adv Pg 204 ..... 7464 W Wilson Ave, Chicago 31 Ill
Leybold Hochvakuum Anlagen ..... Bonner Str. 504, Koeln ..... Ger
Lockheed Aircraft Corp ..... Box 551, Burbank ..... Cal
Lockheed Aircraft Corp. Georgia Div. ..... 1500 Northside Dr, NW, Atlanta 18 ..... Ga
Marquardt Corp. ..... 16555 Saticoy St, Van Nuys ..... Cal
Mason Construction Co, Inc. ..... 2000 Far Hills Ave, Dayton 19 ..... Ohio
Ozone Transport Co. ..... 1 Drumm St, San Francisco ..... Cal
Permutit Foundry & Machine Co. ..... East Liverpool ..... Ohio
Pittsburgh-Des Moines Steel Co. ..... Neville Island, Pittsburgh 25 ..... Pa
Pritchard & Co., J. F. ..... 4935 Roanoke Pkwy, Kansas City ..... Mo
Quonsetpac ..... Box 353, Woodland Hills ..... Cal

RCA SERVICE CO. NUCLEAR & SCIENTIFIC SERVICES,
Adv Pg 31 ..... Cherry Hill, Delaware Tp. Camden 8 ..... NJ
S.E.R.A.L, Adv Pg 113-J ..... 1091 chaussee d'Alsemberg, Beersels 16 ..... Belg
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229 ..... 23 Rd G. Clemenceau, Courbevoie, Seine ..... Fr
Saint-Gobain Inc. ..... Box 12202, Pittsburgh 30 ..... Pa
Sandmeier & Press ..... 75 Wall St, New York 5 ..... NY
Singmaster & Breyer Inc. ..... 100 Park Ave, New York 17 ..... NY
Southwestern Engineering Co. ..... 4800 Santa Fe Ave, Los Angeles 58 ..... Cal
STEARNS-ROGER MFG. CO. Adv Pg 32 ..... Box 5888, Denver 17 ..... Colo
Stone & Webster Engineering Corp. ..... 40 Federal St, Boston 7 ..... Mass
Sumner Sollitt Co. ..... 307 N Michigan Ave, Chicago 1 Ill
United Engineers & Constructors, Inc. ..... 1401 Arch St, Philadelphia 5 ..... Pa
Vitro Corp. of America ..... 261 Madison Ave, New York 16 ..... NY
Wiley Engineering Corp, J. G. ..... 80 Broad St, New York 4 ..... NY

SERV. & CONS'LT: ENGINEERING DRAWINGS

Cronex - Dyne Blueprint & Microfilm Corp.
3701 Wilson Blvd, Arlington 1 ..... Va

SERV. & CONS'LT: ENVIRONMENTAL SURVEYS-RADIOACTIVITY

AMF ATOMICS, Adv. Pgs. 76, 77, 99 ..... 140 Greenwich Ave, Greenwich ..... Conn
Admiral Corp. ..... 3800 W Cortland St, Chicago 47 Ill
Aerojet-General Nucleonics ..... Box 77, San Ramon ..... Cal
Aerojet Div Aerojet-General Corp ..... 410 N Citrus Ave, Covina ..... Cal
Alco Products, Inc. ..... Box 1005, Schenectady 5 ..... NY
Associates Nucleonics Inc. ..... 275 Stewart Ave, Garden City ..... NY
ASTRA, INC., Adv Pg 64 ..... Box 226, Raleigh ..... NC
Atomation, Inc. Div. C. W. Reed Co Inc ..... 5800 S Hoover, L A 44 ..... Cal

ATOMIC RESEARCH LAB. DIV. ATOMIC CORP. OF AMERICA,
Adv Pg 184 ..... 14725 Aviation St, Panorama City ..... Cal
Atomics International Div. NAA ..... Box 309, Canoga Park ..... Cal
Atomium Corp. ..... 940 Main St, Waltham ..... Mass
Bendix Ericsson U.K. Ltd. ..... High Church St, New Romford, Hants ..... Eng
Bethlehem Corp ..... 225 W 2nd St, Bethlehem ..... Pa
Bonnard & Gardel ..... Ave de la Gare 10, Lausanne ..... Switz
Boor-Allen Applied Research, Inc. ..... 1031 Washington Rd, Glenview Ill
Bostrick Associates, Inc ..... 130 E 63rd St, New York 22 ..... NY
Burns & Roe, Inc. ..... 100 W Broadway, New York 13 ..... NY
Combustion Engineering, Inc. ..... 200 Madison Ave, New York 16 ..... NY

CONTROLS FOR RADIATION, INC.
Adv Pg 189 ..... 130 Alewife Brook Pkwy Cambridge 40 ..... Mass
Designers for Industry, Inc. ..... 4041 Fulton Pkwy, Cleveland 9 ..... Ohio

DESERTON, GERMERSHAUSEN & GEIER, OHG.
Adv Pg 205 ..... 160 Brookline Ave, Boston 15 ..... Mass
Electric Boat Div. Gen. Dynamics Corp. ..... Industrial Services Dept. 606, Groton ..... Conn
General Dynamics/Fort Worth ..... Box 748 Fort Worth 1 ..... Tex
Harris Labs. Inc. ..... 4204 Peach St, Lincoln 5 ..... Neb

HAZLETON-NUCLEAR SCIENCE CORP.
Adv Pg 33 ..... 4052 Fabian Way, Palo Alto ..... Cal

ISO/SERVE INC., Adv Pg 88 ..... 131 Portland St, Cambridge 39 ..... Mass
ISOTOPES INC., Adv Pg 192 ..... 123 Woodland Ave, Westwood ..... NJ
Isotopes Specialties Co. ..... Box 808, Burbank ..... Cal
LAMBAUER, JR. & CO., R. S. Adv Pg 12 ..... 3020 216th St, Hartman Ill
Leybold Hochvakuum Anlagen ..... Bonner Str. 504, Koeln ..... Ger
Lockheed Aircraft Corp ..... Box 551, Burbank ..... Cal
Lockheed Aircraft Corp. Georgia Div. ..... 1500 Northside Dr, NW, Atlanta 18 ..... Ga
Malmber Lets Inc ..... 191 Mill Lane, Mountainside ..... NJ
N.A.A., Adv Pg 33 ..... Box 732, State College ..... Pa
Nuclear Consultants Corp. ..... 9065 Manchester Rd, St. Louis 19 ..... Mo

NUCLEAR ENGINEERING CO. INC.,
Adv Pg 119 ..... 1218 Kay St, Box 136, Pleasanton ..... Cal
Nuclear Science & Engineering Corp. ..... Box 10801, Pittsburgh 30 ..... Pa

NUCLEAR UTILITY SERVICES, INC.,
Adv Pg 7 ..... 1025 Connecticut Ave. N W, Wash 6 ..... DC

NUCLEONIC CORP. OF AMERICA,
Adv Pg 202 ..... 196 Dupont St, Brooklyn 31 ..... NY
Quantum, Inc. ..... Lafferty Ave, Wallingford ..... Conn
Radiation Control Inc. ..... 6840 S Euclid Ave, Chicago 17 Ill
Radiation Detection Co. ..... 4847-49 Transport St, Palo Alto ..... Cal
Radiochemistry, Inc. ..... 1111 W St. Catherine St, Louisville 18 ..... Ky
St. John X-Ray Laboratory ..... Califon ..... NJ
TRACERLAB, INC. Adv. Pgs. 134, 113-5 ..... 1601 Trapelo Rd, Waltham 54 ..... Mass
Tracerlab Reactor Monitoring Center ..... 3030 Wright Ave, Richmond ..... Cal
U. S. NUCLEAR CORP., Adv Pg 127 ..... 801 N Lake St, Box 2022, Burbank ..... Cal
Western Radiation Lab. ..... 1107 W 36th St, Los Angeles 7 ..... Cal

SERV. & CONS'LT: FILM BADGE, BETA-GAMMA

Atomation, Inc. Div. C. W. Reed Co Inc. ..... 5800 S Hoover, Los Angeles 44 ..... Cal
Atomic Film Badge Corp. ..... 11-20 46th Rd, Long Island City ..... NY
Bostrick Associates, Inc ..... 130 E 63rd St, New York 22 ..... NY

CONTROLS FOR RADIATION, INC.
Adv Pg 189 ..... 130 Alewife Brook Pkwy Cambridge 40 ..... Mass
Health Physics Services, Inc. ..... 1105-13 Low St, Baltimore 2 ..... Md
ISO/SERVE INC., Adv Pg 88 ..... 131 Portland St, Cambridge 39 ..... Mass
Isotopes Specialties Co. ..... Box 808, Burbank ..... Cal
LAMBAUER, JR. & CO., R. S. Adv Pg 12 ..... 3020 216th St, Hartman Ill

LANDSVERK ELECTROMETER CO.
Adv Pg 250 ..... 645 Sonora Ave, Glendale 1 ..... Cal
Lockheed Aircraft Corp, Georgia Div. ..... 1500 Northside Dr, NW, Atlanta 18 ..... Ga

NUCLEAR-CHICAGO CORP.,
Adv. Pgs. 54-57 ..... 540 E Roosevelt Ave, Des Plaines Ill
Nuclear Consultants Corp. ..... 9065 Manchester Rd, St. Louis 19 ..... Mo
Nuclear Science & Engineering Corp. ..... Box 10801, Pittsburgh 30 ..... Pa
Nuclear Service Labs, Inc, 3 ..... Box 1005, Knoxville 7 ..... Tenn

NUCLEONIC CORP. OF AMERICA,
Adv Pg 202 ..... 196 Dupont St, Brooklyn 31 ..... NY

RCA SERVICE CO. NUCLEAR & SCIENTIFIC SERVICES,
Adv Pg 31 ..... Cherry Hill, Delaware Tp. Camden 8 ..... NJ
Radiation Detection Co. ..... 4847-49 Transport St, Palo Alto ..... Cal
St. John X-Ray Laboratory ..... Califon ..... NJ
TECHNICAL ASSOCIATES, Adv Pg 238 ..... 140 N Fairchilds Ave, Burbank ..... Cal
TRACERLAB, INC. Adv. Pgs. 134, 113-5 ..... 1601 Trapelo Rd, Waltham 54 ..... Mass
U. S. NUCLEAR CORP., Adv Pg 127 ..... 801 N Lake St, Box 2022, Burbank ..... Cal
X-Ray Monitoring Corp ..... 11-20 46th Rd, Long Island City ..... NY

SERV. & CONS'LT: FILM BADGE, NEUTRON

Atomation, Inc. Div. C. W. Reed Co Inc. ..... 5800 S Hoover, Los Angeles 44 ..... Cal
Atomic Film Badge Corp. ..... 11-20 46th Rd, Long Island City ..... NY
Bostrick Associates, Inc ..... 130 E 63rd St, New York 22 ..... NY

CONTROLS FOR RADIATION, INC.
Adv Pg 189 ..... 130 Alewife Brook Pkwy Cambridge 40 ..... Mass
Health Physics Services, Inc. ..... 1105-13 Low St, Baltimore 2 ..... Md
Isotopes Specialties Co. ..... Box 808, Burbank ..... Cal
LAMBAUER, JR. & CO., R. S. Adv Pg 12 ..... 3020 216th St, Hartman Ill

NUCLEAR-CHICAGO CORP.,
Adv. Pgs. 54-57 ..... 540 E Roosevelt Ave, Des Plaines Ill

Nuclear Science & Engineering Corp. ... Box 10901, Pittsburgh 36 ... Pa
Nuclear Service Labs, Inc. ... Box 1885, Knoxville 1 ... Tenn
NUCLEONIC CORP. OF AMERICA.
Adv Pg 292 ... 196 Dupont St. Brooklyn 21 ... NY
Radiation Detection Co. ... 4047-49 Transport St, Palo Alto ... Cal
St. John X-Ray Laboratory ... Califon ... NJ
TRACERLAB, INC. Adv. Pgs. 124, 112-5 ... 1601 Trapelo Rd. Waltham 54 ... Mass
U. S. NUCLEAR CORP., Adv Pg 127 ... 801 N Lake St. Box 2022, Burbank ... Cal
X-ray Monitoring Corp ... 11-01 46th Rd, Long Island City ... NY

SERV. & CONS'LT: FLUID MECHANICS-TESTS & ANALYSIS

Aerojet-General Nucleonics ... Box 77, San Ramon ... Cal
Aerun Div Aerojet-General Corp ... 410 N Citrus Ave, Covina ... Cal
Aircraft Forum Media, Inc. ... Glen Cove ... NY
Atlantic Research Corp. ... Alexandria ... Va
Atomics International Div. NAA Inc. ... Box 309, Canoga Park ... Cal
BABCOCK & WILCOX CO.
Adv. Pgs. 34, 35 ... 161 E 42 St. New York 17 ... NY
Babcock & Wilcox Ltd. ... 209 Euston Rd, London NW 1 ... Eng
Burns & Roe, Inc. ... 320 E Ohio St. Chicago 11 ... Ill
Bunn & Co., C. F. ... Alhambra ... Cal
CHANDLER EVANS CORP. Adv Pg 139 .. Charter Oak Blvd. West Hartford ... Conn
Chamilles Engg. Wm. Ltd. 3 ... 119 Rte de Lyon, Geneva ... Switz
CONTROLS FOR RADIATION, INC.
Adv Pg 109 ... 139 Alewife Brook Pkwy. Cambridge 40 ... Mass
Dilworth, Secord, Meagar & Assoc. Ltd. ... 4216 Dundas St. W, Toronto, Ont. ... Can
Donaldson Co. Inc. ... 858 Pelham Blvd. St. Paul 14 ... Minn
Dynatech Corp. ... 639 Massachusetts Ave, Cambridge 39 ... Mass
Electric Boat Div. Gen. Dynamics Corp. ... Industrial Services Dept. 600, Groton ... Conn
Franklin Institute Labs. ... Philadelphia 3 ... Pa
General Dynamics/Convair ... Box 5878, San Diego 12 ... Cal
HYDRODYNE CORP. Adv Pg 129 ... 7320 Coldwater Canyon Ave. N. Hollywood ... Cal
INTERNUCLEAR CO., Adv Pg 240 ... 7 N Brentwood Blvd. Clayton 5 ... Mo
Marquardt Corp ... 16555 Saticoy St. Van Nuys ... Cal
Neutron Products, Inc ... 1007 Thos. Jefferson St NW, Wash 7 ... DC
Nuclear Science & Engineering Corp. ... Box 10901, Pittsburgh 36 ... Pa
NUCLEAR UTILITY SERVICES, INC.
Adv Pg 7 ... 1025 Connecticut Ave. N W, Wash 6 ... DC
Roy Co., Milton ... 1300 E Mermaid Ln. Phila 18 ... Pa
Schwartzkopf, David M. ... New Canaan ... Conn
Standard-Thomson Corp. ... 168 Grove St, Waltham 54 ... Mass
Sulzer Bros, Ltd. ... Winterthur ... Switz
Telecomputing Corp. ... 8355 Aero Dr, San Diego 13 ... Cal
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.
Adv. Pgs. 70, 71 ... Box 355, Pittsburgh 30 ... Pa

SERV. & CONS'LT: FUEL-SCRAP RECOVERY

Combustion Engineering, Inc. ... 200 Madison Ave, New York 16 ... NY
Electric Boat Div. Gen. Dynamics Corp. ... Industrial Services Dept. 600, Groton ... Conn
Grace & Co, W. R., Davison Chemical Div. ... Erwin ... Tenn
Knapp Mills, Inc. ... 23-15 Borden Ave. LIC 1 ... NY
Leybold Hochvakuum Anlagen ... Bonner Str. 504, Koeln ... Ger
NATIONAL LEAD CO. Adv. Pgs. 60, 61 ... 111 Broadway, New York 6 ... NY
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC)
Adv. Pgs. 217, 219, 221 ... 1007 Warren St. Apollo ... Pa
Nukem, GmbH ... Wolfgang am, Hanau/Main ... Ger
SAint-GOBAIN NUCLEAIRE, Adv Pg 239 ... 23 Rd G. Clemenceau, Courbevoie, Seine ... Fr
UNITED NUCLEAR CORP., Adv Pg 36 ... 363 Westmoreland Ave. New Haven 4 ... Conn

SERV. & CONS'LT: HEALTH PHYSICS ORGANIZATION & PROCEDURES

AMF ATOMICS, Adv. Pgs. 76, 77, 99 ... 140 Greenwich Ave. Greenwich ... Conn
Admiral Corp. ... 3800 W Cortland St. Chicago 47 ... Ill
Aerojet-General Nucleonics ... Box 77, San Ramon ... Cal
Alco Products, Inc. ... Box 1065, Schenectady 5 ... NY
AMERICAN NUCLEAR CORP. Adv Pg 198 ... Box 428, Oak Ridge ... Tenn
Associates Nucleonics Inc. ... 975 Stewart Ave, Garden City ... NY
ASTRA, INC., Adv Pg 64 ... Box 226, Raleigh ... NC
Atomation, Inc, Div, C, W, Reed Co Inc ... 5000 S Hoover, L A 44 ... Cal
ATOMIC RESEARCH LAB. DIV. ATOMIC CORP. OF AMERICA,
Adv Pg 184 ... 14725 Aurora St. Pacoima City ... Cal
Atomics International Div. NAA ... Box 309, Canoga Park ... Cal
Brooks Erimson U.K. Ltd. ... High Church St. New Basford, Nott. ... Eng
Bonnard & Gardel ... Ave de la Gare 16, Lausanne ... Switz
Bour Allen Applied Research, Inc. ... 1001 Washington Rd, Glenview ... Ill
Bestrick Associates, Inc ... 139 E 53rd St, New York 22 ... NY
Burns & Roe, Inc. ... 100 W Broadway, New York 13 ... NY
Combustion Engineering, Inc. ... 200 Madison Ave, New York 16 ... NY
CONTROLS FOR RADIATION, INC.
Adv Pg 109 ... 139 Alewife Brook Pkwy. Cambridge 40 ... Mass
Cook Electric Co. Cook Tech Ctr. ... 6601 W Oakton St, Morton Grove ... Ill
D.I.S.L. Nuclear Corp. ... Via A. Bordoni 36, Milan ... Ital
Degussa ... Box 3063 Frankfurt/Main ... Ger
Hasco Services Inc. ... 2 Rector St, New York 6 ... NY
EBERLINE INSTRUMENT CORP.
Adv Pg 110 ... Box 279, Santa Fe ... Mo
EDGERTON, GERMESHAUSEN & GRIER, INC.
Adv Pg 185 ... 160 Brookline Ave. Boston 15 ... Mass
Electric Boat Div. Gen. Dynamics Corp. ... Industrial Services Dept. 600, Groton ... Conn
Gamma Industries, Inc. ... Box 2543, Baton Rouge ... La
General Dynamics /Fort Worth ... Box 748 Fort Worth 1 ... Tex
Harris Labs. Inc. ... 634 Peach St, Lincoln 8 ... Neb
HAZLETON-NUCLEAR SCIENCE CORP.
Adv Pg 30 ... 4962 Fabian Way, Palo Alto ... Cal
Industrial Hygiene Associates ... 286 Upland Ave, Newton Highlands 61 ... Mass
Industrial X-Ray & Research, Inc. ... 880 Second St. Muskegon ... Mich
ISO/SERVE Ill C., Adv Pg 88 ... 131 Portland St. Cambridge 39 ... Mass

ISOTOPES INC., Adv Pg 193 ... 123 Woodland Ave. Westwood ... NJ
Isotopes Specialties Co. ... Box 808, Burbank ... Cal
JOHNSON & ASSOCIATES, INC., WILLIAM H.
Adv Pg 220 ... Box 415, Montclair Lakes ... NJ
EASON AIRCRAFT CORP. TEXAS BIOMUCLEAR DIV.
Adv Pg 213 ... Box 9401, Austin 37 ... Tex
LANDAUER, JR. & CO., R. S. Adv Pg 12 ... 3520 216th St. Matteson ... Ill
LANDSVERK ELECTROMETER CO.
Adv Pg 230 ... 640 Sunset Ave. Glendale 1 ... Cal
Lockheed Aircraft Corp ... Box 551, Burbank ... Cal
Lockheed Aircraft Corp. Georgia Div. ... 1500 Northside Dr. NW, Atlanta 18 ... Ga
Malmker Lab Inc ... 101 Mill Lane, Moorestown ... NJ
New England Nuclear Corp. ... 575 Albany St. Boston ... Mass
Nuclear Consultants Corp. ... 1042 Manchester Rd, St. Louis 18 ... Mo
Nuclear Decontamination Corp ... 132 Warren St, Apollo ... Pa
NUCLEAR ENGINEERING CO. INC.,
Adv Pg 119 ... 65 Bay St. Box 276, Pleasanton ... Cal
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC)
Adv. Pgs. 217, 219, 221 ... 1007 Warren St. Apollo ... Pa
Nuclear Metals, Inc. ... Box 2225 Concord ... Mass
Nuclear Science & Engineering Corp. ... Box 10901, Pittsburgh 36 ... Pa
Nuclear Technology Corp ... 56 Church St. White Plains ... NY
NUCLEAR UTILITY SERVICES, INC.
Adv Pg 7 ... 1025 Connecticut Ave. N W, Wash 6 ... DC
Peterson Jr., Harold T. ... 301 Profile Bldg. Princeton ... NJ
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 187 ... Eindhoven ... Neth
Porschke & Co, OHG ... Box 2706, Frankfurt/Main 1, Germany
Quantum, Inc. ... Lafferty Ave, Wallingford ... Conn
RCA SERVICE CO. NUCLEAR & SCIENTIFIC SERVICES,
Adv Pg 31 ... Cherry Hill, Delaware Tp. Camden 8 ... NJ
Radiation Control Inc. ... 1040 S Euclid Ave. Chicago 17 ... Ill
Radiation Detection Co. ... 4047-49 Transport St, Palo Alto ... Cal
St. John X-Ray Laboratory ... Califon ... NJ
Siemens-Reiniger-Werke AG. ... Luitpoldstr. 45, Erlangen, Germany
Southeastern Atomic Labs. Inc. ... 4220 Ray to Bay Blvd. Tampa 9 ... Fla
TRG, Inc. ... 2 Aerial Way, Syosset ... NY
TRACERLAB, INC. Adv. Pgs. 124, 112-5 ... 1601 Trapelo Rd. Waltham 54 ... Mass
Tracerlab Reactor Monitoring Center ... 3030 Wright Ave. Richmond ... Cal
UNITED NUCLEAR CORP., Adv Pg 36 ... 363 Westmoreland Ave. New Haven 4 ... Conn
U. S. NUCLEAR CORP., Adv Pg 127 ... 801 N Lake St. Box 2022, Burbank ... Cal
VICTOREEN INSTRUMENT CO.,
Adv. Pg. 4th Cover ... 5800-11 Hough Ave. Cleveland 3 ... Ohio
Volk Radiochemical Co. ... 6500 Elmwood Ave, Skokie ... Ill
Western Radiation Lab. ... 1107 W 36th St, Los Angeles 7 ... Cal
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.
Adv. Pgs. 70, 71 ... Box 355, Pittsburgh 30 ... Pa

SERV. & CONS'LT: HEAT TRANSFER-TESTS & ANALYSIS

Advanced Technology Labs. ... 360 Whisman Rd. Mountain View ... Cal
Aerojet-General Nucleonics ... Box 77, San Ramon ... Cal
Aerun Div Aerojet-General Corp ... 410 N Citrus Ave, Covina ... Cal
Alco Products, Inc. ... Box 1065, Schenectady 5 ... NY
ASTRA, INC., Adv Pg 64 ... Box 226, Raleigh ... NC
Atomics International Div. NAA Inc. ... Box 309, Canoga Park ... Cal
BABCOCK & WILCOX CO.
Adv. Pgs. 34, 35 ... 161 E 42 St. New York 17 ... NY
Babcock & Wilcox Ltd. ... 209 Euston Rd, London NW 1 ... Eng
Burns & Roe, Inc. ... 320 E Ohio St. Chicago 11 ... Ill
Bunn & Co., C. F. ... Alhambra ... Cal
Canadian General Electric Co. Ltd. ... 107 Park St. Peterborough, Ont. ... Can
Chicago Bridge & Iron Co. ... 332 S Michigan Ave, Chicago 4 ... Ill
Combustion Engineering, Inc. ... 200 Madison Ave. New York 16 ... NY
Denver Fire Clay Co. ... Box 6610, Denver 17 ... Colo
Dilworth, Secord, Meagar & Assoc. Ltd. ... 4216 Dundas St. W, Toronto, Ont. ... Can
Dynatech Corp. ... 639 Massachusetts Ave. Cambridge 39 ... Mass
Hasco Services Inc. ... 2 Rector St, New York 6 ... NY
Electric Boat Div. Gen. Dynamics Corp. ... Industrial Services Dept. 600, Groton ... Conn
FOSTER WHEELER CORP. Adv Pg 128 .. 666 5th Ave. New York 19 ... NY
Franklin Institute Labs. ... Philadelphia 3 ... Pa
Garrett Corp. ... 9851 Sepulveda Blvd. Los Angeles 45 ... Cal
General Applied Science Labs. Inc. ... Merrick & Stewart Ave. Westbury ... NY
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.
Adv Pg 289 ... Box 608, San Diego 12 ... Cal
General Dynamics/Convair ... Box 2672, San Diego 12 ... Cal
General Nuclear Engineering Corp. ... Box 1661, Tonsilla ... Fla
INTERNUCLEAR CO., Adv Pg 240 ... 7 N Brentwood Blvd. Clayton 5 ... Mo
MSA Research Corp ... Callery ... Pa
Marquardt Corp ... 16555 Saticoy St. Van Nuys ... Cal
Neutron Products, Inc ... 1007 Thos. Jefferson St NW, Wash 7 ... DC
Northern Research & Eng. Corp. ... 230 Main St. Cambridge ... Mass
NUCLEAR UTILITY SERVICES, INC.
Adv Pg 7 ... 1025 Connecticut Ave. N W, Wash 6 ... DC
ROYAL RESEARCH CORP. Adv Pg 21 ... 11824 Dublin Blvd. Hayward ... Cal
Schwartzkopf, David M. ... New Canaan ... Conn
SOCIETE RATEAU, Adv Pg 113-7 ... Rue Rateau Le Coudraceau, Seine ... Fr
Southwestern Engineering Co. ... 4800 Santa Fe Ave, Los Angeles 58 ... Cal
Standard-Thomson Corp. ... 168 Grove St, Waltham 54 ... Mass
Sulzer Bros. Ltd. ... Winterthur ... Switz
Telecomputing Corp. ... 8355 Aero Dr, San Diego 11 ... Cal
Vickers Armstrong (S Marston) Ltd. ... Swindon, Wiltshire ... Eng
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.
Adv. Pgs. 70, 71 ... Box 355, Pittsburgh 30 ... Pa

SERV. & CONS'LT: HOT LABORATORY

Admiral Corp. ... 3800 W Cortland St. Chicago 47 ... Ill
Aerun Div Aerojet-General Corp ... 410 N Citrus Ave, Covina ... Cal

ALLIED ENGINEERING & PRODUCTION CORP.,
Adv Pg 242 ... 3421 Bunding Ave. Alexandria ... Cal
AMERICAN NUCLEAR CORP. Adv Pg 199 ... Box 428, Oak Ridge ... Tenn
Atlantic Research Corp. ... Alexandria ... Va
Atomics International Div. NAA ... Box 309, Canoga Park ... Cal
Bechtel Corp. ... 220 Bush St. San Francisco 4 ... Cal
Belge de Chimie Nucleaire, Cie. ... 35 rue des Colonies, Brussels ... Belg
BELGONUCLEAIRE, Adv Pg 113-4 ... 35 rue des Colonies, Brussels 1 ... Belg
Bolsa & Co. Inc., R. D. ... 515 Market St. San Francisco 5 ... Cal
Burns & Roe, Inc. ... 100 W Broadway, New York 13 ... NY
Carborundum Co. R & D Div ... New Prod. Dr. NRC, Niagara Falls ... NY
Cook Electric Co. Cook Tech Ctr. ... 6601 W Oakton St. Morton Grove ... Ill
Dynatech Corp. ... 639 Massachusetts Ave, Cambridge 39 ... Mass
Hasco Services Inc. ... 2 Rector St, New York 6 ... NY
Electric Boat Div. Gen. Dynamics Corp. ... Industrial Services Dept. 600, Groton ... Conn
Adv Pg 289 ... Box 608, San Diego 12 ... Cal
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.
General Dynamics /Fort Worth ... Box 748 Fort Worth 1 ... Tex
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ... 1 River Rd. Schenectady 5 ... NY
General Nuclear Engineering Corp. ... Box 1661, Tonsilla ... Fla
HAZLETON-NUCLEAR SCIENCE CORP.
Adv Pg 30 ... 4962 Fabian Way, Palo Alto ... Cal
INDATON, Adv Pg 113-6 ... 48 rue le Bastie, Paris 8e ... Fr
INTERNUCLEAR CO., Adv Pg 240 ... 7 N Brentwood Blvd. Clayton 5 ... Mo
Irwin & Partners Ltd., E. G. ... 118 Southwark St. London SE1 ... Eng
KAISER ENGINEERS, Adv Pg 98 ... 300 Lakeside Dr. Oakland 12 ... Cal
Lockheed Aircraft Corp ... Box 551, Burbank ... Cal
Lockheed Aircraft Corp. Georgia Div. ... 1500 Northside Dr. NW, Atlanta 18 ... Ga
Malmker Lab Inc ... 101 Mill Lane, Moorestown ... NJ
Neutron Products, Inc ... 1007 Thos. Jefferson St NW, Wash 7 ... DC
Nuclear Science & Engineering Corp. ... Box 10901, Pittsburgh 36 ... Pa
Nuclear Technology Corp ... 56 Church St. White Plains ... NY
NUCLEAR UTILITY SERVICES, INC.
Adv Pg 7 ... 1025 Connecticut Ave. N W, Wash 6 ... DC
Quantum, Inc ... Lafferty Ave. Wallingford ... Conn
RCA SERVICE CO. NUCLEAR & SCIENTIFIC SERVICES,
Adv Pg 31 ... Cherry Hill, Delaware Tp. Camden 8 ... NJ
S.E.R.A.L., Adv Pg 113-J ... 1091 chaussee d'Alsemberg, Brussels 18 ... Belg
TRG, Inc ... 2 Aerial Way, Syosset ... NY
UNITED NUCLEAR CORP., Adv Pg 36 ... 363 Westmoreland Ave. New Haven 4 ... Conn
Vickers Armstrongs (S. Marston) Ltd. ... Swindon, Wiltshire, England
Vitro Corp. of America ... 261 Madison Ave. New York 16 ... NY
Western Nuclear Corp. ... Box 1136, Idaho Falls ... Idaho
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.
Adv. Pgs. 70, 71 ... Box 355, Pittsburgh 30 ... Pa
WESTINGHOUSE TESTING REACTOR,
Adv. Pgs. 195 & 70, 71 ... Box 1972, Pittsburgh 30 ... Pa

SERV. & CONS'LT: IN-PILE TEST DESIGN

AEG, Adv Pg 113-A ... Hauptstr, Frankfurt/Main, Germany
AMF ATOMICS, Adv. Pgs. 76, 77, 99 ... 140 Greenwich Ave. Greenwich ... Conn
Admiral Corp. ... 3800 W Cortland St. Chicago 47 ... Ill
Advanced Technology Labs. ... 360 Whisman Rd. Mountain View ... Cal
Aerojet-General Nucleonics ... Box 77, San Ramon ... Cal
Aerun Div Aerojet-General Corp ... 410 N Citrus Ave, Covina ... Cal
Associates Nucleonics Inc. ... 975 Stewart Ave, Garden City ... NY
Atomics International Div. NAA ... Box 309, Canoga Park ... Cal
BABCOCK & WILCOX CO.
Adv. Pgs. 34, 35 ... 161 E 42 St. New York 17 ... NY
Babcock & Wilcox Ltd. ... 209 Euston Rd, London NW 1, England
BELGONUCLEAIRE, Adv Pg 113-4 ... 35 rue des Colonies, Brussels 1 ... Belg
Burns & Roe, Inc. ... 100 W Broadway, New York 13 ... NY
Combustion Engineering, Inc. ... 200 Madison Ave, New York 16 ... NY
Dynatech Corp. ... 639 Massachusetts Ave. Cambridge 39 ... Mass
Hasco Services Inc. ... 2 Rector St, New York 6 ... NY
Electric Boat Div. Gen. Dynamics Corp. ... Industrial Services Dept. 600, Groton ... Conn
Adv Pg 289 ... Box 608, San Diego 12 ... Cal
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.
General Dynamics /Fort Worth ... Box 748 Fort Worth 1 ... Tex
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ... 1 River Rd. Schenectady 5 ... NY
General Nuclear Engineering Corp. ... Box 1661, Tonsilla ... Fla
HAZLETON-NUCLEAR SCIENCE CORP.
Adv Pg 30 ... 4962 Fabian Way, Palo Alto ... Cal
INDATON, Adv Pg 113-6 ... 48 rue le Bastie, Paris 8e ... Fr
INTERNUCLEAR CO., Adv Pg 240 ... 7 N Brentwood Blvd. Clayton 5 ... Mo
Irwin & Partners Ltd., E. G. ... 118 Southwark St. London SE1 ... Eng
KAISER ENGINEERS, Adv Pg 98 ... 300 Lakeside Dr. Oakland 12 ... Cal
Lockheed Aircraft Corp ... Box 551, Burbank ... Cal
Lockheed Aircraft Corp. Georgia Div. ... 1500 Northside Dr. NW, Atlanta 18 ... Ga
Malmker Lab Inc ... 101 Mill Lane, Moorestown ... NJ
Neutron Products, Inc ... 1007 Thos. Jefferson St NW, Wash 7 ... DC
Nuclear Science & Engineering Corp. ... Box 10901, Pittsburgh 36 ... Pa
Nuclear Technology Corp ... 56 Church St. White Plains ... NY
NUCLEAR UTILITY SERVICES, INC.
Adv Pg 7 ... 1025 Connecticut Ave. N W, Wash 6 ... DC
Quantum, Inc ... Lafferty Ave. Wallingford ... Conn
RCA SERVICE CO. NUCLEAR & SCIENTIFIC SERVICES,
Adv Pg 31 ... Cherry Hill, Delaware Tp. Camden 8 ... NJ
S.E.R.A.L., Adv Pg 113-J ... 1091 chaussee d'Alsemberg, Brussels 18 ... Belg
TRG, Inc ... 2 Aerial Way, Syosset ... NY
UNITED NUCLEAR CORP., Adv Pg 36 ... 363 Westmoreland Ave. New Haven 4 ... Conn
Vickers Armstrongs (S. Marston) Ltd. ... Swindon, Wiltshire, England
Vitro Corp. of America ... 261 Madison Ave. New York 16 ... NY
Western Nuclear Corp. ... Box 1136, Idaho Falls ... Idaho
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.
Adv. Pgs. 70, 71 ... Box 355, Pittsburgh 30 ... Pa
WESTINGHOUSE TESTING REACTOR,
Adv. Pgs. 195 & 70, 71 ... Box 1972, Pittsburgh 30 ... Pa

SERV. & CONS'LT: INSURANCE—NUCLEAR RISK

Babb & Co.	3 Gateway Center, Pittsburgh 22	Pa
Bosco Services Inc.	2 Rector St, New York 6	NY
Marsh & McLennan, Inc.	221 S LaSalle St. Chicago 4	Ill
Middle West Service Co.	20 N Wacker Dr. Chicago	Ill
Mutual Atomic Energy Liability Underwriters	110 N Michigan Ave, Chicago 11	Ill
Mutual Atomic Energy Reinsurance Pool	110 N Michigan Ave, Chicago 11	Ill
Mutual Boiler & Machy Insurance Co.	226 Wyman St, Waltham 54	Mass
Nuclear Energy Liability Ins Assoc.	60 John St, New York 38	NY
Nuclear Energy Property Ins. Assoc.	65 Woodland St, Hartford 5	Conn
Pomm, Theckerman & Pomm Mut. Cas. Ins. Co.	1000 Derry St, Harrisburg	Pa

SERV. & CONS'LT: IRRADIATION-ACCELERATOR

Admiral Corp.	2800 W Cortland St. Chicago 47	Ill
ASTRA, INC., Adv Pg 64	Box 22B, Raleigh	NC
Dresser Research Div. Dresser Ind. Inc.	10700 Independence St, Tulsa	Okla
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. Adv Pg 282	Box 608, San Diego 12	Cal
HAZLETON-NUCLEAR SCIENCE CORP. Adv Pg 38	4862 Fabian Way, Palo Alto	Cal
HIGH VOLTAGE ENGINEERING CORP. Adv Pg 179	3 Bedford St. Burlington	Mass
HUGHES AIRCRAFT CO. NUCLEONICS LAB. Adv Pg 285	Box 2097, Fullerton	Cal
KAMAN AIRCRAFT CORP. TEXAS BIO-NUCLEAR DIV. Adv Pg 275	Box 9431, Austin 17	Tex
Miles Hivolt Ltd	Old Shoreham Rd, Hassham-by-Sea, Sussex	Eng
OAK RIDGE NATL LAB, ISOTOPES SALES DEPT. Adv Pg 236	Box X, Oak Ridge	Tenn
Quantum, Inc	Lafferty Ave. Wallingford	Conn
Radiation Dynamics Inc.	Westbury Industrial Pk. Westbury	NY
Texas Nuclear Corp.	Box 9097, Allandale Sta. Austin 17	Tex
Transitab Reactor Monitoring Center	3000 Wright Ave. Richmond	Cal

SERV. & CONS'LT: IRRADIATION-ISOTOPIC

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
Advanced Technology Labs.	820 Whisman Rd. Mountain View	Cal
AMERICAN NUCLEAR CORP. Adv Pg 199	Box 43B, Oak Ridge	Tenn
ASTRA, INC., Adv Pg 64	Box 22B, Raleigh	NC
Atlantic Research Corp.	Alexandria	Va
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV. Adv. Pgs. 110, 231	Box 93, Ottawa, Ont	Can
Bowe-Allen Applied Research, Inc.	1001 Washington Rd, Glenview	Ill
Cook Electric Co. Cook Tech Ctr.	6601 W Oakton St, Morton Grove	Ill
Gamma Industries, Inc.	Box 2543, Baton Rouge	La
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
HAZLETON-NUCLEAR SCIENCE CORP. Adv Pg 38	4862 Fabian Way, Palo Alto	Cal
HUGHES AIRCRAFT CO. NUCLEONICS LAB. Adv Pg 285	Box 2097, Fullerton	Cal
Hunslet Precision Engrg. Ltd.	Leeds 10	Eng
INTERNUCLEAR CO., Adv Pg 248	7 N Brentwood Blvd, Clayton 5	Mo
Isotopes Specialties Co.	Box 608, Burbank	Cal
Jem Pennsylvania Mfg. Corp	6 Huron Dr. Natick	Mass
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lockheed Aircraft Corp. Georgia Div.	1500 Northside Dr. NW, Atlanta 18	Ga
Malmier Lein Inc	191 Mill Lane, Mountainside	NJ
Nuclear Products, Inc	1007 Thos. Jefferson St NW, Wash 7	DC
Nuclear Consultants Corp.	9045 Manchester Rd, St. Louis 18	Mo
Quantum, Inc.	Lafferty Ave, Wallingford	Conn
Radiation Applications, Inc.	36-40 37th St, Long Island City 1	NY
RADIATION COUNTER LABS. INC. Adv. Pgs. 82, 83	5122 W Grove St. Skokie	Ill
Transitab Reactor Monitoring Center	3000 Wright Ave, Richmond	Cal
UNITED NUCLEAR CORP., Adv Pg 38	163 Wooster Ave. New Haven 4	Conn
U. S. NUCLEAR CORP., Adv Pg 127	801 W Lake St. Box 2022, Burbank	Cal
WESTINGHOUSE TESTING REACTOR, Adv. Pgs. 195 & 70, 71	Box 1073, Pittsburgh 30	Pa

SERV. & CONS'LT: IRRADIATION-REACTOR

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
Admiral Corp.	2800 W Cortland St. Chicago 47	Ill
Advanced Technology Labs.	820 Whisman Rd. Mountain View	Cal
Aerojet-General Nucleonics	Box 77, San Ramon	Cal
ASTRA, INC., Adv Pg 64	Box 22B, Raleigh	NC
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV. Adv. Pgs. 110, 231	Box 93, Ottawa, Ont	Can
Atomics International Div. NAA	Box 309, Canoga Park	Cal
BABCOCK & WILCOX CO. Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
CONTROLS FOR RADIATION, INC. Adv Pg 189	130 Alewife Brook Pkwy Cambridge 40	Mass
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. Adv Pg 282	Box 608, San Diego 12	Cal
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
HAZLETON-NUCLEAR SCIENCE CORP. Adv Pg 38	4862 Fabian Way, Palo Alto	Cal
Institut for Atomenergi	Box 170, Lillestrom, Kjeller	Nor
INTERNUCLEAR CO., Adv Pg 248	7 N Brentwood Blvd, Clayton 5	Mo
ISO/SERVE INC., Adv Pg 88	131 Portland St. Cambridge 39	Mass
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lockheed Aircraft Corp. Georgia Div.	1500 Northside Dr. NW, Atlanta 18	Ga
Nuclear Science & Engineering Corp.	Box 10901, Pittsburgh 36	Pa
NUCLEAR UTILITY SERVICES, INC., Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
OAK RIDGE NATL LAB, ISOTOPES SALES DEPT. Adv Pg 236	Box X, Oak Ridge	Tenn
Quantum, Inc	Lafferty Ave. Wallingford	Conn
S.E.R.A.L., Adv Pg 113-J	1091 chaussee d'Alsemberg, Brussels 18	Belg
Stagnaro & Dreyer Inc.	100 Park Ave. New York 17	NY
Transitab Reactor Monitoring Center	3000 Wright Ave. Richmond	Cal
UNITED NUCLEAR CORP., Adv Pg 38	163 Wooster Ave. New Haven 4	Conn
Vickers Armstrong (S Marston) Ltd.	Swindon, Wiltshire	Eng
Western Nuclear Corp.	Box 1246, Idaho Falls	Idaho
WESTINGHOUSE TESTING REACTOR, Adv. Pgs. 195 & 70, 71	Box 1073, Pittsburgh 30	Pa

SERV. & CONS'LT: LAUNDRY-CONTAMINATED CLOTHING

Bulge de Climate Nucleaire, Sta.	36 rue des Colonies, Brussels	Belg
BIRELINE INSTRUMENT CORP. Adv Pg 115	Box 239, Santa Fe	NM
Gauch & Co., W. R. Division-Chemical Div.	Ervin	Tenn
Industrial Over-All Laundry	1804 Thomasson Ave, Waterbury 16	Conn
Insurance Industrial Uniform Rental Service	206 Parker St. Indian Orchard	Mass
Leybold Hochvakuum Anlagen	Bonner Str. 504, Koln	Ger
Lockheed Aircraft Corp. Georgia Div.	1500 Northside Dr. NW, Atlanta 18	Ga
Nuclear Decontamination Corp	132 Warren St, Apollo	Pa
NUCLEAR ENGINEERING CO. INC., Adv Pg 179	65 Bay St. Box 270, Pleasanton	Cal
Nuclear Laundry Service Inc.	Box 4165, Waterbury 16	Conn
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	22 Ed G. Clemenceau, Courbevoie, Seine	Fr

SERV. & CONS'LT: LEAK TESTING

Aerojet Div Aerojet-General Corp	410 N Citrus Ave, Covina	Cal
ALLIED ENGINEERING & PRODUCTION CORP. Adv Pg 242	2421 Blending Ave. Alameda	Cal
Atlas Titanium, Ltd.	Centre St, Welland, Ont.	Can
Automation, Inc, Div. C. W. Hand Co Inc	6800 S Denver, L A 44	Cal
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV. Adv. Pgs. 110, 231	Box 93, Ottawa, Ont	Can
Bonney-Floyd Co.	833 Marion Rd, Columbus 7	Ohio
Bostwick Associates, Inc	130 E 42nd St, New York 22	NY
Bachler & Co	Frankfurter Str. 324, Braunschweig	Ger
Budd Co. Instruments Div.	Box 565, Phoenixville	Pa
Combustion Engineering, Inc.	900 Medison Ave, New York 16	NY
Dynatech Corp.	639 Massachusetts Ave. Cambridge 39	Mass
Edwards High Vacuum, Inc.	3279 Grand Island Blvd, Grand Island	NY
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept, 600, Groton	Conn
Gamma Industries, Inc.	Box 2543, Baton Rouge	La
General Dynamics/Convair	Box 2578, San Diego 12	Cal
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
HAZLETON-NUCLEAR SCIENCE CORP. Adv Pg 38	4862 Fabian Way, Palo Alto	Cal
Instruments Inc.	Box 686, Tulsa	Okla
Irvin & Partners Ltd., E. G.	118 Southwark St, London SE1	Eng
ISO/SERVE INC., Adv Pg 88	131 Portland St. Cambridge 39	Mass
KAMAN NUCLEAR, Adv. Pgs. 198, 191	Garden of the Gods Rd. Colo Springs	Colo
LAMBERTS ELECTROMETER CO. Adv Pg 216	645 Sonora Ave. Glendale 1	Cal
LIONEL ELECTRONIC LABS. Adv Pg 216	1226 Flushing Ave. Brooklyn 37	NY
Magnaflux Corp.	7300 W Lawrence, Chicago 31	Ill
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. Adv Pg 2	Box 896, Attleboro	Mass
N.A.A., Adv Pg 33	Box 732, State College	Pa
National Research Corp	70 Memorial Dr. Cambridge 42	Mass
Nuclear Consultants Corp.	9045 Manchester Rd. St. Louis 18	Mo
NUCLEAR ENGINEERING CO. INC., Adv Pg 179	65 Bay St. Box 270, Pleasanton	Cal
NUCLEAR MATERIALS & EQUIP. CORP. (NUMECO), Adv. Pgs. 217, 219, 221	1988 Verne St. Apollo	Pa
Nuclear Science & Engineering Corp.	Box 10901, Pittsburgh 36	Pa
Nukem, GmbH	Wolfgang am, Hanau/Main	Ger
Olmont Corp.	2206 Regan St, Cincinnati 22	Ohio
Ontario Research Foundation	43 Queen's Pk, Toronto 5, Ontario	Can
Radiation Control Inc.	6043 S Euclid Ave. Chicago 17	Ill
Radiation Detection Co.	4047-49 Transport St. Palo Alto	Cal
Southeastern Atomic Labs. Inc.	4520 Bay to Bay Blvd, Tampa 9	Fla
State Testing Lab. Inc.	327 Knowlton St. Bridgeport 6	Conn
Swiss Reg. Ltd.	Winterthur	Switz
Telecomputing Corp.	8135 Aero Dr. San Diego 11	Cal
THOMSON-HOUSTON (CIE. FRANCAISE), Adv Pg 112-B	173 Blvd. Haussman, Paris 8	Fr
Transitab Reactor Monitoring Center	3000 Wright Ave, Richmond	Cal
U. S. NUCLEAR CORP., Adv Pg 127	801 W Lake St. Box 2022, Burbank	Cal
Vacuum Apparatus Co	Box 1091, Palo Alto	Cal
Vacuum-Electronic Corp.	Terminal Dr. Plainview	NY
Vacuum Research (Cambridge) Ltd.	Cheverton, Bridge St. Cambridge, Eng	
Wall Colmonoy Corp. Nucleonics Processing Div.	19866 John R. St. Detroit 3	Mich
Western Radiation Lab.	1307 W 59th St. Los Angeles 7	Cal

SERV. & CONS'LT: MANAGEMENT ECONOMICS CONSULTING

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
Advanced Technology Labs.	820 Whisman Rd. Mountain View	Cal
Aerojet Div Aerojet-General Corp	410 N Citrus Ave, Covina	Cal
Alco Products, Inc.	Box 1008, Schenectady 5	NY
Bechtel Corp.	220 Bush St. San Francisco 4	Cal
Bowe-Allen Applied Research, Inc.	1001 Washington Rd. Glenview	Ill
Brown & Co., C. F.	Alhambra	Cal
Canadian Nuclear Assoc.	19 Richmond St. W, Toronto 1	Can
Day & Zimmermann, Inc.	1700 Sansom St, Philadelphia 3	Pa
Dilworth, Secord, Meagher & Assoc. Ltd.	4814 Dundas St. W, Toronto, Ont.	Can
Dynatech Corp.	639 Massachusetts Ave. Cambridge 39	Mass
Bosco Services Inc.	2 Rector St. New York 6	NY
Franklin Institute Labs.	Philadelphia 3	Pa
Hall Associates	30 W Monroe St, Chicago 13	Ill
Industrial Marketing Assoc.	11950 San Vicente Blvd, L A 49	Cal
INTERNUCLEAR CO., Adv Pg 248	7 N Brentwood Blvd, Clayton 5	Mo
KAISER ENGINEERS, Adv Pg 95	300 Lakeside Dr. Oakland 12	Cal
Malmier Lein Inc	191 Mill Lane, Mountainside	NJ
Middle West Service Co.	20 N Wacker Dr. Chicago	Ill
Neugroschl Associates, Inc	230 Riverside Dr, New York 25	NY
Nuclear Technology Corp	84 Church St. White Plains	NY
NUCLEAR UTILITY SERVICES, INC., Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
Pickard-Wanner-Lowe Assoc.	1025 Conn. Ave. NW, Washington 6	DC
Planning Research Corp.	2300 Westwood Blvd, L A 64	Cal
Rosenberg Associates, Paul	100 Sussex Ave. Mt. Vernon	NY
S.E.R.A.L., Adv Pg 113-J	1091 chaussee d'Alsemberg, Brussels 18	Belg
Sandstrom & Forbes	72 Wall St. New York 5	NY
Sargent & Lundy	140 S Dearborn St. Chicago 3	Ill
STEARNS-ROGER MFG. CO. Adv Pg 32	Box 5888, Denver 17	Colo
Stone & Webster Engineering Corp.	48 Federal St. Boston 7	Mass
United Engineers & Constructors, Inc.	1401 Arch St. Philadelphia 5	Pa

SERV. & CONS'LT: MATERIALS HANDLING

See Also CRANES
MANIPULATORS—HEAVY-DUTY
MANIPULATORS—REMOTE
TONGS

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
Aerojet Div Aerojet-General Corp	410 N Citrus Ave, Covina	Cal
ALLIED ENGINEERING & PRODUCTION CORP. Adv Pg 242	2421 Blending Ave. Alameda	Cal
Alloys Research & Mfg. Corp.	34-28 57th St, Woodside 77	NY
Allmetal Design & Devel. Co. Inc.	25 N Warren St, Trenton	NJ
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV. Adv. Pgs. 110, 231	Box 93, Ottawa, Ont	Can
BABCOCK & WILCOX CO. Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Babcock & Wilcox Ltd.	168 Fenchurch St, London EC 3, England	
Barnes & Reinecke, Inc.	230 S Ohio St, Chicago 11	Ill
Bowe-Allen Applied Research, Inc.	1001 Washington Rd. Glenview	Ill
BROOKS & PERKINS, Adv Pg 114	1930 W Fort St. Detroit 16	Mich
Burns & Roe, Inc.	100 W Broadway, New York 13	NY
Cayuga Machine & Fabricating Co. Inc.	200 W Gould Ave. Depew	NY
Consolidated Controls Corp.	14 Durant Ave. Bethel	Conn
Consolidated Western Steel Div. U. S. Steel Corp.	Box 5016, Term. Ann. L A 54	Cal
Cummings & Barnard, Inc.	2060 S State, Ann Arbor	Mich
Cutler-Hammer, Inc.	410 N 27th St, Milwaukee 1	Wis
Day & Zimmermann, Inc.	1700 Sansom St, Philadelphia 3	Pa
Dilworth, Secord, Meagher & Assoc Ltd	4814 Dundas St. W Toronto, Ont Canada	
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept, 600, Groton	Conn
Evans & Son (Portsmouth) Ltd., J.	Marcys Wks, Portsmouth, Hants	Eng
EX-CELLO CORP. ATOMICS DIV. Adv. Pgs. 8, 9	1200 Oakman Blvd. Detroit 22	Mich
Franklin Institute Labs.	Philadelphia 3	Pa
General Dynamics/Convair	Box 2578, San Diego 12	Cal
HAZLETON-NUCLEAR SCIENCE CORP. Adv Pg 38	4862 Fabian Way, Palo Alto	Cal
Hall Associates	30 W Monroe St, Chicago 13	Ill
Irvin & Partners Ltd., E. G.	118 Southwark St, London SE1	Eng
Kaliper Corp.	1300 N Broad St, Philadelphia 22	Pa
Leybold Hochvakuum Anlagen	Bonner Str. 504, Koln	Ger
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lockheed Aircraft Corp. Georgia Div.	1500 Northside Dr. NW, Atlanta 18	Ga
Loftus Corp., Peter F.	Pittsburgh Nat. Bank Bldg, Pittsburgh 22	Pa
Marquardt Corp.	16555 Saticoy St, Van Nuys	Cal
Ocean Transport Co.	1 Drumm St, San Francisco	Cal
PACIFIC COAST ENGINEERING CO. Adv Pg 289	Berkeley, Alameda	Cal
PHOENIX-RHEINROHR AG, Adv Pg 27	August-Thyssen-Str 1, Duesseldorf	Ger
Planning Research Corp.	2300 Westwood Blvd, L A 64	Cal
Pye, Ltd	St. Andrews Rd, Cambridge	Eng
Reliance Incorporated	1210-1212 Adams Ave, Phila 24	Pa
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	22 Ed G. Clemenceau, Courbevoie, Seine	Fr
Sumner Sollitt Co	307 N Michigan Ave. Chicago 1	Ill
Transitab Reactor Monitoring Center	3000 Wright Ave, Richmond	Cal
Vitro Corp. of America	261 Madison Ave, New York 16	NY
White Engineering Corp., J. G.	80 Broad St, New York 6	NY

SERV. & CONS'LT: MATERIALS, NONMETAL—RESEARCH & DEVELOPMENT

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
Advanced Technology Labs.	820 Whisman Rd. Mountain View	Cal
Aerojet Div Aerojet-General Corp	410 N Citrus Ave, Covina	Cal
Atlas Titanium, Ltd.	Centre St, Welland, Ont.	Can
Atomics International Div. NAA Inc.	Box 309, Canoga Park	Cal
BABCOCK & WILCOX CO. Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY

Carborundum Co. Refractories Div. ..... Perth Amboy ..... NJ
Carborundum Co. R & D Div ..... New Prods. Dr. NBG, Niagara Falls ..... NY
Consolidated Electrodynamics Corp. ..... 360 Sierra Madre Villa, Pasadena ..... Cal
Curtiss-Wright Corp. Research Div. ..... Quehanna ..... Pa
Electric Boat Div. Gen. Dynamics Corp. ..... Industrial Services Dept. 608, Groton ..... Conn
Fulmer Research Institute ..... Stoke Poges, Bucks. ..... Eng
Gaede Mfg. Co. ..... 83 John St. Cumberland ..... RI
General Aeronautic Corp. ..... 2857 Tonnen Ave. Yonkers 2 ..... NY
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.
Adv Pg 282 ..... Box 608, San Diego 12 ..... Cal
GENERAL ELECTRIC CO. APPARATUS SALES.
Adv. Pgs. 11, 12 ..... 1 River Rd. Schenectady 5 ..... NY
HARSHAW CHEMICAL CO. Adv Pg 89 ..... 1945 E 97th St. Cleveland 6 ..... Ohio
Haveg Industries Inc. ..... 955 Greenhill Rd. Wilmington 9 ..... Del
Horizons Inc. ..... 2905 E 79th St. Cleveland 4 ..... Ohio
Jim Fenestermaker Mfg. Corp ..... 6 Huron Dr. Natick ..... Mass
Laboratory Equipment Corp. ..... St. Joseph ..... Mich
Mackay, Inc., A. B. ..... 198 Broadway, New York 38 ..... NY
Marquardt Corp ..... 16555 Saticoy St. Van Nuys ..... Cal
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.
Adv Pg 2 ..... Box 970, Attleboro ..... Mass
NATIONAL LEAD CO. Adv. Pgs. 80, 81 ..... 111 Broadway, New York 6 ..... NY
National Research Corp ..... 70 Memorial Dr. Cambridge 42 ..... Mass
NUCLEAR ENTERPRISES LTD.,
Adv Pg 194 ..... 550 Berry St. Winnipeg 21 ..... Man
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC).
Adv. Pgs. 217, 219, 221 ..... 1000 Hunter St. Apollo ..... Pa
Nuclear Research Associates, Inc. ..... 30-15 Hunters Pt. Ave. LIC 1 ..... NY
Ontario Research Foundation ..... 43 Queen's Pk. Toronto 5, Ontario ..... Can
Pickard-Warren-Lowe Assn. ..... 1025 Conn. Ave. NW, Washington 6 ..... DC
Planar Ltd., G. V. ..... Windmill Rd. Sunbury-on-Thames, Middx ..... Eng
Quantum, Inc ..... Lafferty Ave. Wallingford ..... Conn
Radiation Applications, Inc. ..... 36-40 37th St. Long Island City 1 ..... NY
Radiochemistry, Inc ..... 1111 W St. Catharine St. Louisville 10 ..... Ky
Reactor Materials Inc. ..... Box 418, Peekskill ..... NY
Rosenberg Associates, Paul ..... 100 Stevens Ave. Mt. Vernon ..... NY
ROYAL RESEARCH CORP. Adv Pg 21 ..... 11836 Dublin Blvd. Hayward ..... Cal
S.E.R.A.L. Adv Pg 113-J ..... 1091 chaussee d'Alsemberg, Brussels 18 ..... Belg
Rosenberg Ceramics, Inc. ..... Box 157, Saxonburg ..... Pa
Stanford & Co., W. S. ..... 13037 Jefferson Blvd, Culver City ..... Cal
Special Instrument Laboratory, Inc ..... 332 W Vine Ave, Knoxville 03 ..... Tenn
State Testing Lab. Inc ..... 227 Knowlton St, Bridgeport 8 ..... Conn
TRC, Inc ..... 5 Aerial Way, Syosset ..... NY
Transcomputing Corp. ..... 6155 Aero Dr. San Diego 11 ..... Cal
TELEPLEX INC. Adv Pg 242 ..... Church Rd. North Wales ..... Pa
U. S. NUCLEAR CORP., Adv Pg 127 ..... 881 W Lake St. Box 3022, Burbank ..... Cal
Vacuum Research (Cambridge) Ltd. ..... Clayhythe, Bridge St. Cambridge ..... Eng
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT
Adv. Pgs. 70, 71 ..... Box 355, Pittsburgh 30 ..... Pa

SERV. & CONS'LT: METAL FABRICATION-FERROUS

Accurate Sheet Metal & Mfg. Works Inc. ..... 2320-44 Milwaukee Ave. Chicago 47 Ill
Air & Refrigeration Corp. ..... 420 Madison Ave, New York 17 ..... NY
ALLIED ENGINEERING & PRODUCTION CORP.,
Adv Pg 242 ..... 2421 Blending Ave. Alameda ..... Cal
Allison Div. Gen. Motors Corp. ..... Box 894, Indianapolis ..... Ind
Amco Engineering Co. ..... 7333 Aimslie St. Chicago 31 Ill
American Metal Products Co. ..... 5959 Lindale Ave. Detroit 4 ..... Mich
American Welding & Mfg. Co. ..... 555 Dietz Rd. Warren ..... Ohio
Associated Engrg. & Mfg. Corp. ..... 210 Stonehouse Rd. Glen Ridge ..... NJ
AVERY & SAUL CO., Adv Pg 72 ..... 115 Rindge Ave. Cambridge ..... Mass
BABCOCK & WILCOX CO.
Adv. Pgs. 34, 35 ..... 161 E 42 St. New York 17 ..... NY
Babcock & Wilcox Ltd. ..... 209 Euston Rd. London NW 1, England
Baldwin-Lima-Hamilton Corp. ..... Dept N 8, Philadelphia 42 ..... Pa
Bethlehem Steel Corp. ..... 701 E 3rd St. Bethlehem ..... Pa
Bigelow Co. ..... Box 706, New Haven 3 ..... Conn
Bishop & Co., J., Platinum Works ..... Malvern ..... Pa
BLICKMAN, INC., S., Adv Pg 188 ..... 7900 Gregory Ave. Weehawken ..... NJ
CPC ENGINEERING CORP. Adv Pg 226 ..... Box 36, Stoughton ..... Mass
Canadian Westinghouse Co, Ltd. ..... Box 510, Hamilton, Ontario, Canada
Cayuga Machine & Fabricating Co. Inc. ..... 200 W Gould Ave. Depew ..... NY
CHANDLER EVANS CORP. Adv Pg 128 ..... Charter Oak Blvd. West Hartford ..... Conn
Chicago Bridge & Iron Co. ..... 332 S Michigan Ave, Chicago 4 Ill
CONTROLLED ATMOSPHERE ENCLOSURES MFG CO
Adv Pg 38 ..... Lemond Air Base, Marianna ..... Fla
Denver Fire Clay Co. ..... Box 5610, Denver 17 ..... Colo
De Vilbiss Co. ..... 300 Phillips Ave. Toledo 1 ..... Ohio
Donaldson Co. Inc. ..... 600 Pelham Blvd. St. Paul 14 ..... Minn
EX-CELLO CORP. ATOMICS DIV.
Adv. Pgs. 6, 9 ..... 1200 Dalmas Blvd. Detroit 32 ..... Mich
POSTER WHEELER CORP. Adv Pg 138 ..... 666 5th Ave. New York 19 ..... NY
Fraser & Co. Ltd., W. J. ..... Harold Hill, Romford, Essex, England
General Alloys Co. ..... 600 W 1st St, Boston 27 ..... Mass
General American Transportation Corp. ..... 135 S LaSalle St, Chicago 3 Ill
General Dynamics /Fort Worth ..... Box 748 Fort Worth 1 ..... Tex
General Metal Products Co ..... Centre & Glendale, Easton ..... Pa
Gower Tank & Mfg. Co. Div. Union Tank Car Co. ..... 35 E Wacker Dr. Chicago 1 Ill
Graham-Bussell Co ..... Massillon ..... Ohio
Harvey & Co. (London) Ltd., G. A. ..... Woolwich Rd. London, SE7 ..... Eng
Horton Steel Works, Ltd. ..... 55 Adelaide St. W, Toronto ..... Ont
Hujco Div. Hoffman University-Industrial ..... Box 691, Pasco ..... Wash
JERPBAK-BAYLESS CO., Adv Pg 188 ..... 34150 Solon Rd. Solon ..... Ohio
Kelley & Co., O. G. ..... 98 Taylor St. Boston 22 ..... Mass
Knapp Mills Inc. ..... 23-15 Borden Ave. LIC ..... NY
KRUEGER FABRICATING CO. INC.,
Adv Pg 222 ..... Box 1284, Madison 1 ..... Wis
L & S Machine Co, Inc. ..... Box 317, R. D. 3, Latrobe ..... Pa
LANDVERK ELECTROMETER CO.
Adv Pg 218 ..... 647 Sonora Ave. Glendale 1 ..... Cal
Ladner Boiler & Engineering Corp. ..... 2801 S Wolcott Ave, Chicago 8 Ill
Leader Iron Works, Inc. ..... 2110 N Jasper St, Decatur Ill
Lockheed Aircraft Corp. ..... Box 551 Burbank ..... Cal
LOMA MACHINE MFG. CO. INC.
Adv Pg 189 ..... 114 E 32nd St. New York ..... NY
Lorraine-Escaut ..... 7 Rond-Point Bugeaud, Paris 16e ..... Fr
Marvel-Schebler Products Div.,
Borg-Warner Corp. ..... 2186 S Elwin Rd, Decatur Ill
Mason, Shover & Hunsicker, Inc. ..... Box 551, Irwin ..... Pa
Monsanto Mfg. Co. ..... 800 E San Fernando Blvd. Burbank ..... Cal
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.
Adv Pg 2 ..... Box 970, Attleboro ..... Mass
NATIONAL ANNEALING BOX CO.
Adv Pg 184 ..... Box 538, Washington ..... Pa
National Forge Co ..... Irvine, Warren City ..... Pa
National Machine Co. Inc. ..... 230 Lanit St. Newark 5 ..... NJ
NEWBROOK MACHINE CORP., Adv Pg 93 ..... Silver Creek ..... NY
Nuclear Metals, Inc. ..... Box 225 Concord ..... Mass
PACIFIC COAST ENGINEERING CO.
Adv Pg 200 ..... Denver E, Alameda ..... Cal
Penn Film & Specialty Co. ..... 5050 E Westmoreland St. Philadelphia 24 ..... Pa
Pittsburgh-Des Moines Steel Co. ..... Neville Island, Pittsburgh 25 ..... Pa
Pittsburgh Piping & Equipment Co. ..... 158 49th St. Pittsburgh ..... Pa
Research Equipment Co. ..... 888 Sunnyside, Wheaton Ill
ROYAL RESEARCH CORP. Adv Pg 21 ..... 11836 Dublin Blvd. Hayward ..... Cal
Salem-Brosius Inc. ..... Box 2232, Pittsburgh 30 ..... Pa
STALKER CORP. Adv Pg 206 ..... 1021 Randolph Ave. Knoxville ..... Mich
STEARNS-ROGER MFG. CO. Adv Pg 52 ..... Box 5888, Denver 17 ..... Colo
SYLCOR DIV. SYLVANIA ELEC PROD. INC.
Adv Pg 26 ..... Centigun Rock Rd. Hicksville ..... NY
TORNBERG CO. INC., C. W. Adv Pg 209 ..... 236 Pearl St. Somerville 43 ..... Mass
Universal Match Corp. Armament Div. ..... 472 Paul Ave. St. Louis 26 ..... Mo
UNITED NUCLEAR CORP., Adv Pg 36 ..... 563 Winchester Ave. New Haven 4 ..... Conn
Vogue Instrument Corp. ..... 2356 Linden Blvd. Brooklyn 8 ..... NY
Warren Corp. ..... 2901 Brighton Rd. Pittsburgh 12 ..... Pa
WESTINGHOUSE ELEC CORP. STEAM DIV.
Adv. Pgs. 70, 71 ..... Lester ..... Pa
Wheeler Mfg. Co. C. H. ..... 1860 Sedgley Ave. Philadelphia 32 ..... Pa
Williamette Iron & Steel Co. ..... 200 NW Front Ave. Portland ..... Ore

SERV. & CONS'LT: METAL FABRICATION-NONFERROUS

Accurate Sheet Metal & Mfg. Works Inc. ..... 2320-44 Milwaukee Ave. Chicago 47 Ill
ALLIED ENGINEERING & PRODUCTION CORP.,
Adv Pg 242 ..... 2421 Blending Ave. Alameda ..... Cal
Alloys Unlimited, Inc. ..... 21-01 43rd Ave. LIC 1 ..... NY
Aluminum Co. of America ..... 1501 Alcoa Bldg. Pittsburgh 19 ..... Pa
Amco Engineering Co. ..... 7333 Aimslie St. Chicago 31 Ill
American Metal Products Co. ..... 5959 Lindale Ave. Detroit 4 ..... Mich
American Welding & Mfg. Co. ..... 555 Dietz Rd. Warren ..... Ohio
Associated Engrg. & Mfg. Corp. ..... 210 Stonehouse Rd. Glen Ridge ..... NJ
Atlas Titanium, Ltd. ..... Centre St. Welland, Ont. ..... Can
BABCOCK & WILCOX CO.
Adv. Pgs. 34, 35 ..... 161 E 42 St. New York 17 ..... NY
Babcock & Wilcox Ltd. ..... 209 Euston Rd. London NW 1, England
Baldwin-Lima-Hamilton Corp. ..... Dept N 8, Philadelphia 42 ..... Pa
Barnes Development Co ..... 215 W Baltimore Pike, Lansdowne ..... Pa
Beryllia Corp. Industrial Ceramic Sect. ..... 21800 Wyoming Ave. Detroit 37 ..... Mich
Bethlehem Corp ..... 701 W 2nd St, Bethlehem ..... Pa
Bigelow Co. ..... Box 706, New Haven 3 ..... Conn
Bishop & Co., J., Platinum Works ..... Malvern ..... Pa
BLICKMAN, INC., S., Adv Pg 188 ..... 7900 Gregory Ave. Weehawken ..... NJ
Brewster Instrument Corp. ..... 6000 Hadley Rd. Fort Wayne ..... Ind
BROOKS & PERKINS, Adv Pg 114 ..... 7930 W Fort St. Detroit 16 ..... Mich
CPC ENGINEERING CORP. Adv Pg 226 ..... Box 36, Stoughton ..... Mass
Cantico ..... Box 5064, Jacksonville 7 ..... Fla
Cayuga Machine & Fabricating Co. Inc. ..... 200 W Gould Ave. Depew ..... NY
CHANDLER EVANS CORP. Adv Pg 128 ..... Charter Oak Blvd. West Hartford ..... Conn
Chemical Milling International Corp. ..... 1330 E Franklin Ave. El Segundo ..... Cal
Chicago Bridge & Iron Co. ..... 332 S Michigan Ave. Chicago 4 Ill
Consolidated Reactive Metals, Inc. ..... 216 Hoyt St. Mamaroneck ..... NY
CONTROLLED ATMOSPHERE ENCLOSURES MFG CO
Adv Pg 38 ..... Lemond Air Base, Marianna ..... Fla
Cummins & Barnard, Inc. ..... 2060 S State, Ann Arbor ..... Mich
Degussa ..... Box 7 Gal, Frankfurt/Main ..... Ger
Denver Fire Clay Co. ..... Box 5610, Denver 17 ..... Colo
De Vilbiss Co. ..... 300 Phillips Ave. Toledo 1 ..... Ohio
Evans & Son (Portsmouth) Ltd., J.,
Marsyn Wks. ..... Goldsmith Ave. Portsmouth, Hants, Eng
EX-CELLO CORP. ATOMICS DIV.
Adv. Pgs. 6, 9 ..... 1200 Dalmas Blvd. Detroit 32 ..... Mich
Fairmont Co. ..... 7 Fairmont Ct. Passaic ..... NJ
Penn Mfg. Co. ..... 800 Penn St. Bridgeport ..... Conn
Gaede Mfg. Co. ..... 83 John St. Cumberland ..... RI
General Alloys Co. ..... 600 W 1st St. Boston 27 ..... Mass
General American Transportation Corp. ..... 135 S LaSalle St. Chicago 3 Ill
General Automatic Corp. ..... 2857 Tonnen Ave. Yonkers 2 ..... NY
General Dynamics/Convair ..... Box 5873, San Diego 12 ..... Cal
Hartford Special Machinery Co. ..... College Way, Simsbury ..... Conn
HARVEY ALUMINUM, Adv Pg 39 ..... 19200 S Western Ave. Torrance ..... Cal
Howell, Inc., John ..... Box 2272, Westbury ..... NY
Haynes Stellite Co. Div. of UCC ..... 270 Park Ave. New York 17 ..... NY

Sutton Steel Works, Ltd. ..... 55 Adelaide St. W, Toronto ..... Ont
JEPPESE-BAYLESS CO., Adv Pg 180 ... 34180 Solon Rd. Solon ..... Ohio
Kelley & Co., G. G. ..... 10 Tayler St, Boston 22 ..... Mass
Kelley Industries Inc. ..... Eighty-Four ..... Pa
Kiffer Tool & Die Inc. ..... 1691 Tillman Ave, Cleveland 9 ..... Ohio
Knapp Mills Inc. ..... 23-15 Borden Ave, LIC ..... NY
KRUEGER FABRICATING CO. INC.,
Adv Pg 222 ..... Box 1204, Madison 1 ..... Wis
L & S Machine Co. Inc. ..... Box 217, S. D. 2, Lansdale ..... Pa
Ladish Co. ..... 5481 S Packard Ave, Cudahy ..... Wis
Linen Engineering Labs. ..... Box 948, Grass Valley ..... Cal
Lockheed Aircraft Corp. ..... Box 551 Burbank ..... Cal
M. Ten Beech, Inc. ..... 89 Wheeler Ave, Pleasantville ..... NY
Marquardt Corp. ..... 16555 Saticoy St, Van Nuys ..... Cal
Mason, Glover & Hindles, Inc. ..... Box 551, Irwin ..... Pa
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.
Adv Pg 2 ..... Box 936, Attleboro ..... Mass
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV.
Adv Pg 138 ..... St. Louis ..... Mich
National Valve & Mfg. Co. ..... 3131 Liberty Ave, Pittsburgh 1 ..... Pa
Nuclear Corp. ..... 1404 S 3rd St, St. Louis 68 ..... Mo
Nuclear Metals, Inc. ..... Box 220 Concord ..... Mass
Nukem, GmbH ..... Wolfgang am, Hanau/Main ..... Ger
PACIFIC COAST ENGINEERING CO.
Adv Pg 200 ..... Denver E, Alameda ..... Cal
Pall Corp. ..... Glen Cove ..... NY
Pfaudler Co. Div. Pfaudler Permutit Inc. ..... 1000 West Ave, Rochester 3 ..... NY
PHOENIX-RHEINROHR AG, Adv Pg 27 ... August-Thyssen-Str 1, Duesseldorf ..... Ger
Pittsburgh-Des Moines Steel Co. ..... Neville Island, Pittsburgh 25 ..... Pa
Pittsburgh Piping & Equipment Co. ..... 158 49th St, Pittsburgh ..... Pa
Poole & Co. (Sutton) Ltd., S. A. ..... Willow Walk, Sutton, Surrey, England
PRECISION EXTRUSIONS INC.
Adv Pg 93 ..... 730 E Green Ave, Bensenville Ill
Radiation Products, Inc. ..... Pt. 40 Rd, Flushing 60 ..... NY
Reactor Materials Inc. ..... Box 413, Pawtucket ..... NY
ROYAL RESEARCH CORP. Adv Pg 21 ... 11836 Dublin Blvd. Hayward ..... Cal
Salem-Brosius Inc. ..... Box 12251, Pittsburgh 30 ..... Pa
Sanel-Alloys Inc. ..... 20 N Macquesten Pkwy, Mt. Vernon ..... NY
Sheffield Corp. Sub. Bendix Corp. ..... 721 Springfield St, Dayton 1 ..... Ohio
Sonnenring-Gas-Fenster AG ..... Sonnenringer Hauptr. 50, Vienna 7 ..... Aus
Southwestern Engineering Co. ..... 4000 Santa Fe Ave, Los Angeles 58 ..... Cal
Special Instruments Laboratory, Inc ..... 322 N Vine Ave, Knoxville 02 ..... Tenn
SYLCOR DIV. SYLVANIA ELEC PRODS. INC.
Adv Pg 26 ..... Costiagan Rock Rd. Hicksville ..... NY
Sylvania Elec Prods Inc. Chem & Met
Div. ..... Towanda ..... Pa
TRG, Inc ..... 2 Aerial Way, Syosset ..... NY
Tapco Div. Thompson Ramo Wooldridge
Inc. ..... 23555 Euclid Ave, Cleveland 17 ..... Ohio
Telecomputing Corp. ..... 8155 Aero Dr, San Diego 11 ..... Cal
TELEPLEX INC. Adv Pg 243 ..... Church Rd. North Wales ..... Pa
UNITED NUCLEAR CORP., Adv Pg 26 .. 265 Winchester Ave, New Haven 4 ..... Conn
Unit Process Assemblies ..... 55-15 37th Ave, Woodside 77 ..... NY
Universal Cyclops Steel Corp. ..... Bridgeville ..... Pa
Vacuum Research (Cambridge) Ltd. ..... Quayside, Bridge St, Cambridge, Eng
Vickers-Armstrongs (S. Marston) Ltd. ..... Swindon, Wiltshire, England
Vitro Corp. of America ..... 201 Madison Ave, New York 16 ..... NY
Wall Colmonoy Corp. Stainless Processing
Div. ..... 19344 John R, St. Detroit 3 ..... Mich
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.
Adv. Pgs. 70, 71 ..... Box 355, Pittsburgh 30 ..... Pa

SERV. & CONS'LT: MICROFILMING

Cooper-Trent Electric & Microfilm
Corp. ..... 2701 Milton Blvd, Arlington 1 ..... Va
Microcard Corp. ..... West Salem ..... Wis

SERV. & CONS'LT: MONITORING

Aerojet-General Corp ..... 410 N Citrus Ave, Covina ..... Cal
Alco Products, Inc. ..... Box 1055, Schenectady 5 ..... NY
Beckman Corp-Beckman Pacific Div. ..... 11600 Sherman Way, N Hollywood ..... Cal
Berwick Associates, Inc ..... 159 E 53rd St, New York 22 ..... NY
California Tech. Ind. Div. Textron Inc. ..... 1421 Old County Rd, Belmont ..... Cal
CONTROLS FOR RADIATION, INC.
Adv Pg 189 ..... 130 Alewife Brook Pkwy Cambridge 40 ..... Mass
Curtiss-Wright Corp. Princeton Div. ..... Box 110, Princeton ..... NJ
EBERLINE INSTRUMENT CORP.
Adv Pg 115 ..... Box 279, Santa Fe ..... NM
EDGERTON, GERMESHAUSEN & GRIER, INC.
Adv Pg 185 ..... 168 Brookline Ave, Boston 15 ..... Mass
Electric Boat Div. Gen. Dynamics Corp. ..... Industrial Services Dept. 800, Groton ..... Conn
Franklin Institute Labs. ..... Philadelphia 3 ..... Pa
Gamma Industrie ..... 22 Rue de Dunkerque, Paris 9 ..... Fr
General Dynamics /Fort Worth ..... Box 748 Fort Worth 1 ..... Tex
ISO/SERVE INC., Adv Pg 88 ..... 121 Parford St. Cambridge 39 ..... Mass
ISOTOPES INC., Adv Pg 192 ..... 173 Vandland Ave, Westwood ..... NJ
Isotopes Specialties Co. ..... Box 5681, Burbank ..... Cal
LAND-AIR INC. SUB. DYNALECTRON INC.
Adv Pg 204 ..... 7444 W Wilson Ave, Chicago 31 Ill
LANDGRAFF, JR. & CO., H. S. Adv Pg 12 ..... 3838 Zinn St. Harrison Ill
Leeds & Northrup Co. ..... 4901 Stenton Ave, Phila 44 ..... Pa
Lockheed Aircraft Corp ..... Box 551, Burbank ..... Cal
Lockheed Aircraft Corp. Georgia Div. ... 1600 Northside Dr. NW, Atlanta 18 ..... Ga
Monitor Systems Inc. ..... Dept. T, Pt. Wash. Ind. Pk, Pt. Wash. ..... Pa
National Spectrographic Lab. Inc. ..... 6300 Euclid Ave, Cleveland 3 ..... Ohio
Nuclear Consultants Corp. ..... 1043 Hanchester Rd. St. Louis 18 ..... Mo
NUCLEAR ENGINEERING CO. INC.,
Adv Pg 119 ..... 65 Bay St. Box 218, Pleasanton ..... Cal
Nuclear Science & Engineering Corp. ... Box 10301, Pittsburgh 36 ..... Pa
NUCLEONIC CORP. OF AMERICA,
Adv Pg 202 ..... 186 Degraw St. Brooklyn 31 ..... NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 187 ..... Eindhoven ..... Neth
Radiation Control Inc. ..... 6043 S Euclid Ave. Chicago 17 Ill
RADIATION TECHNOLOGY, INC.
Adv. Pg. Ind Cover ..... 657 Antone St. NW, Atlanta 18 ..... Ga
S.A.I.P. ..... 30, Rue Gabriel Crie, Malakoff, Seine ..... Fr
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229 23 Rd G. Clemenceau, Courbevoie, Seine ..... Fr
St. John X-Ray Laboratory ..... Caldwell ..... NJ
Southeastern Atomic Labs. Inc. ..... 4809 Bay to Bay Blvd. Tampa 9 ..... Fla
Special Instruments Laboratory, Inc ..... 322 N Vine Ave, Knoxville 02 ..... Tenn
THERMO ELECTRIC CO. INC.
Adv Pg 208 ..... Saddle Brook ..... NJ
Tosi, S.p.A., Franco ..... Legnano, Milan ..... Ital
Tracerlab Reactor Monitoring Center ..... 9030 Wright Ave, Richmond ..... Cal
U. S. NUCLEAR CORP., Adv Pg 127 ..... 801 N Lake St. Box 2032, Burbank ..... Cal
VICTOREEN INSTRUMENT CO.,
Adv. Pg. 4th Cover ..... 5806-11 Hough Ave. Cleveland 3 ..... Ohio

SERV. & CONS'LT: NONDESTRUCTIVE TESTING

See SERV. & CONS'LT: TESTING, NONDESTRUCTIVE

SERV. & CONS'LT: NUCLEAR-FACILITY DESIGN, NONREACTOR

AMF ATOMICS, Adv. Pgs. 76, 77, 79 ..... 140 Greenwich Ave, Greenwich ..... Conn
Admiral Corp. ..... 3800 W Cortland St. Chicago 47 Ill
Advanced Technology Labs. ..... 252 Whisman Rd. Mountain View ..... Cal
Aerojet-General Nucleonics ..... Box 77, San Ramon ..... Cal
Aerojet-General Corp ..... 410 N Citrus Ave, Covina ..... Cal
Aerojet-General Nucleonics Inc. ..... 976 Stewart Ave. Garden City ..... NY
ASTRA, INC., Adv Pg 64 ..... Box 2261 Raleigh ..... NC
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV.,
Adv. Pgs. 118, 231 ..... Box 93, Toronto, Ont ..... Can
Atomics International Div. NAA ..... Box 309, Canoga Park ..... Cal
Bechtel Corp. ..... 220 Bush St, San Francisco 4 ..... Cal
Bolsa & Co. Inc., R. D. ..... 615 Market St, San Francisco 5 ..... Cal
Bunn-Allen Applied Research, Inc. ..... 1631 Washington Rd. Glenview Ill
Bendix, Hopf & Adler ..... 230 E 22nd St. New York 10 ..... NY
Burns & Roe, Inc. ..... 160 W Broadway, New York 13 ..... NY
Catalytic Construction Co. ..... 1500 Walnut St. Philadelphia 2 ..... Pa
Cayuga Machine & Fabricating Co. Inc. ..... 200 W Gould Ave, Depew ..... NY
Cook Electric Co. Cook Tech Ctr. ..... 6601 W Oakton St. Morton Grove Ill
Copper, Evence (EZEC) ..... 100 Bd. de Waterloo, Brussels ..... Belg
Dilworth, Secord, Meagher & Assoc. Ltd. ..... 4314 Dundas St. W, Toronto, Ont ..... Can
Dollo & Associates, John ..... 200 S La Salle St, Chicago 4 Ill
Dumbleton & Assoc. Inc., B. M. ..... 836 Lafayette St. New Orleans 12 ..... La
Dynatech Corp. ..... 600 Massachusetts Ave, Cambridge 39 ..... Mass
Ebasco Services Inc. ..... 2 Rector St, New York 6 ..... NY
EDGERTON, GERMESHAUSEN & GRIER, INC.
Adv Pg 185 ..... 168 Brookline Ave, Boston 15 ..... Mass
Electric Boat Div. Gen. Dynamics Corp. ..... Industrial Services Dept. 800, Groton ..... Conn
Dobbank & Partners Ltd. ..... 11 Grosvenor Pl, London, SW 1, Eng
Ferguson Co., H. K. ..... 1700 E 11th St, at Walnut, Cleveland 14 ..... Ohio
Franklin Institute Labs. ..... Philadelphia 3 ..... Pa
General Dynamics /Fort Worth ..... Box 748 Ft / Worth 1 ..... Tex
Gilbert Associates, Inc. ..... 825 Lancaster Ave. Reading ..... Pa
HAZLETON-NUCLEAR SCIENCE CORP.
Adv Pg 88 ..... 4862 Fabian Way, Palo Alto ..... Cal
HUGHES AIRCRAFT CO. NUCLEONICS LAB.
Adv Pg 203 ..... Box 2097, Fullerton ..... Cal
INTERNUCLEAR CO., Adv Pg 240 ..... 7 W Beaverwood Blvd. Clayton 5 ..... Mo
Irwin & Partners Ltd., E. G. ..... 108 Southwark St. London SE1 ..... Eng
Jackson & Moreland, Inc ..... 600 Park Square Bldg. Boston 16 ..... Mass
KAISER ENGINEERS, Adv Pg 95 ..... 300 Lakeside Dr. Oakland 12 ..... Cal
KAMAN NUCLEAR, Adv. Pgs. 190, 191 .. Garden of the Gods Rd. Colo Springs ..... Colo
Kullman Corp. ..... 1300 N Broad St, Philadelphia 22 ..... Pa
L'Electronique Appliquee ..... 26 rue de Docteur Finlay, Paris 15 ..... Fr
Lockheed Aircraft Corp ..... Box 551, Burbank ..... Cal
Lockheed Aircraft Corp. Georgia Div. ... 1600 Northside Dr. NW, Atlanta 18 ..... Ga
Loftus Corp., Peter F. ..... First Natl. Bank Bldg. Pittsburgh 22 ..... Pa
Mein, Inc., Chas. T. ..... 80 Federal St, Boston 10 ..... Mass
Meissner Lehn Inc ..... 191 Mill Lane, Mountainside ..... NJ
Marquardt Corp. ..... 16555 Saticoy St. Van Nuys ..... Cal
Minto Research Laboratory ..... 3027 Bay Rd, East Palo Alto ..... Cal
Mott and McLellan ..... McLellan House, Surrey, England
NUCLEAR UTILITY SERVICES, INC.,
Adv Pg 7 ..... 1025 Connecticut Ave. N W, Wash 6 ..... DC
Pearson Jr., Harold T. ..... 301 Fusilier Bldg. Princeton ..... NJ
Pickard-Warner-Lowe Assoc. ..... 1025 Conn Ave, NW, Wash 6 ..... DC
Quantum, Inc ..... Lafferty Ave. Wallingford ..... Conn
Quinnes Engineers, Ltd. ..... 812 W 8th St, L A 17 ..... Cal
RCA SERVICE CO. NUCLEAR & SCIENTIFIC SERVICES,
Adv Pg 21 ..... Cherry Hill, Delaware Tp. Camden 8 ..... NJ
RADIATION TECHNOLOGY, INC.
Adv. Pg. Ind Cover ..... 657 Antone St. NW, Atlanta 18 ..... Ga
Rosenberg Associates, Paul ..... 186 Duryea Ave, Inf. Vienna ..... NY
ROYAL RESEARCH CORP. Adv Pg 21 ... 11836 Dublin Blvd. Hayward ..... Cal
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229 23 Rd G. Clemenceau, Courbevoie, Seine ..... Fr
Sanderson & Porter ..... 72 Wall St, New York 5 ..... NY
Sargent & Lundy ..... 140 S Dearborn St. Chicago 3 Ill
Singmaster & Breyer Inc. ..... 100 Park Ave, New York 17 ..... NY
SOCIETE RATEAU, Adv Pg 113-7 ..... Rue Rateau La Courneuve, Seine ..... Fr
Stanley Engineering Co. ..... Hershey Blvd, Muscatine ..... Iowa
STEARNS-ROGER MFG. CO. Adv Pg 32 .. Box 5888, Denver 17 ..... Colo

Stone & Webster Engineering Corp.	40 Federal St, Boston 7	Mass
Sumner Sollitt Co	307 N Michigan Ave, Chicago 1	Ill
TRG, Inc.	2 Aerial Way, Syosset	NY
UNITED NUCLEAR CORP., Adv Pg 26	265 Westchester Ave, New Haven 4	Conn
United Engineers & Constructors, Inc.	1401 Arch St, Philadelphia 5	Pa
U. S. NUCLEAR CORP., Adv Pg 127	881 W Lake St, Box 2022, Burbank	Cal
Vickers-Armstrongs (S. Marston) Ltd.	Swindon, Wiltshire, England	
Vitro Corp. of America	261 Madison Ave, New York 16	NY
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.		
Adv. Pgs. 70, 71	Box 355, Pittsburgh 30	Pa

SERV. & CONS'LT: NUCLEAR-MATERIAL ACCOUNTABILITY

Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Alco Products, Inc.	Box 1065, Schenectady 5	NY
Bear Allen Applied Research, Inc.	1021 Washington Rd, Glenview	Ill
Bertu & Roe, Inc.	100 W Broadway, New York 13	NY
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
CONTROLS FOR RADIATION, INC.		
Adv Pg 189	130 Alewife Brook Pkwy, Cambridge 40	Mass
Gamma Industries, Inc.	Box 2543, Baton Rouge	La
HAZLETON-NUCLEAR SCIENCE CORP.		
Adv Pg 38	4062 Fabian Way, Palo Alto	Cal
INTERNUCLEAR CO., Adv Pg 240	7 N Brentwood Blvd, Clayton 5	Mo
Isotopes & Co.	260 Alfred Ave, Teaneck	NJ
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lockheed Aircraft Corp, Georgia Div.	1500 Northside Dr, NW, Atlanta 18	Ga
Malmker Lab Inc	191 Mill Lane, Mountainside	NJ
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC)		
Adv. Pgs. 217, 219, 221	1800 Warren St, Apollo	Pa
Nuclear Metals, Inc.	Box 222 Concord	Mass
Nuclear Science & Engineering Corp.	Box 10901, Pittsburgh 36	Pa
NUCLEAR UTILITY SERVICES, INC.		
Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
Pickard-Warren-Lowe Assoc.	1025 Conn Ave, NW, Wash 6	DC
Tracerlab Reactor Monitoring Center	2030 Wright Ave, Richmond	Cal
UNITED NUCLEAR CORP., Adv Pg 26	265 Westchester Ave, New Haven 4	Conn
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.		
Adv. Pgs. 70, 71	Box 355, Pittsburgh 30	Pa

SERV. & CONS'LT: NUCLEAR PHYSICS

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave, Greenwich	Conn
Advanced Technology Labs.	820 Whisman Rd, Mountain View	Cal
Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Alco Products, Inc.	Box 1065, Schenectady 5	NY
Associates Nucleonics Inc.	975 Stewart Ave, Garden City	NY
ASTRA, INC., Adv Pg 64	Box 336, Raleigh	NC
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV.,		
Adv. Pgs. 115, 231	Box 93, Ottawa, Ont	Can
Atomics International Div. NAA Inc.	Box 309, Canoga Park	Cal
Furmanite Corp.	800 Main St, Waltham	Mass
Berwick Associates, Inc	130 E 63rd St, New York 22	NY
CONTROLS FOR RADIATION, INC.		
Adv Pg 189	130 Alewife Brook Pkwy Cambridge 40	Mass
EDGERTON, GERMESHAUSEN & GRIER, INC.		
Adv Pg 105	160 Brookline Ave, Boston 15	Mass
Franklin Institute Labs.	Philadelphia 3	Pa
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.		
Adv Pg 202	Box 608, San Diego 12	Cal
General Dynamics/Convair	Box 80773, San Diego 12	Cal
General Dynamics /Fort Worth	Box 748 Fort Worth 1	Tex
HIGH VOLTAGE ENGINEERING CORP.		
Adv Pg 179	1 Bedford St, Burlington	Mass
INTERNUCLEAR CO., Adv Pg 240	7 N Brentwood Blvd, Clayton 5	Mo
L'Electronique Appliquee	35 rue du Docteur Finlay, Paris 15, Fr	
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lockheed Aircraft Corp, Georgia Div.	1500 Northside Dr, NW, Atlanta 18	Ga
Main, Inc., Chas. T.	80 Federal St, Boston 10	Mass
Malmker Lab Inc	191 Mill Lane, Mountainside	NJ
Neutron Products, Inc	1007 Thos. Jefferson St NW, Wash 7	DC
Nuclear Consultants Corp.	8062 Manchester Rd, St. Louis 18	Mo
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC)		
Adv. Pgs. 217, 219, 221	1800 Warren St, Apollo	Pa
Nuclear Science & Engineering Corp.	Box 10901, Pittsburgh 36	Pa
Nuclear Technology Corp	56 Church St, White Plains	NY
NUCLEAR UTILITY SERVICES, INC.		
Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
Portachin & Co. oHG	Box 2705, Frankfurt/Main 1	Ger
Quantedyne	Box 383, Woodland Hills	Cal
RADIATION TECHNOLOGY, INC.		
Adv. Pg. 3rd Cover	437 Antone St. NW, Atlanta 18	Ga
Rensselaer Associates, Prod	100 Stevens Ave, Mt. Vernon	NY
S. A. I. P.	30 Rue Gabriel Crie, Maisons-Alfort, Seine	Fr
SOLID STATE RADIATIONS, INC.		
Adv Pg 211	2261 S Carmelina Ave, LA 64	Cal
Solmar Prod. Ltd.	Winnipeg	Swit
TRG, Inc.	2 Aerial Way, Syosset	NY
Texas Nuclear Corp.	Box 8987, Allandale Sta, Austin 17	Tex
TRACERLAB, INC. Adv. Pgs. 134, 113-5	1601 Trapelo Rd, Waltham 54	Mass
Tracerlab Reactor Monitoring Center	2030 Wright Ave, Richmond	Cal
UNITED NUCLEAR CORP., Adv Pg 26	265 Westchester Ave, New Haven 4	Conn
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.		
Adv. Pgs. 70, 71	Box 355, Pittsburgh 30	Pa

SERV. & CONS'LT: PERSONNEL, NUCLEAR

Atomic Personnel, Inc.	1616 Walnut St, Philadelphia 3	Pa

SERV. & CONS'LT: PLANT-SITE LOCATION

See SERV. & CONS'LT: SITE LOCATION

SERV. & CONS'LT: RADIATION EFFECTS-MATERIALS

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave, Greenwich	Conn
Admiral Corp.	3800 W Cortland St, Chicago 47	Ill
Advanced Technology Labs.	820 Whisman Rd, Mountain View	Cal
Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Alco Products, Inc.	Box 1065, Schenectady 5	NY
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV.,		
Adv. Pgs. 115, 231	Box 93, Ottawa, Ont	Can
Atomics International Div. NAA Inc.	Box 309, Canoga Park	Cal
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St, New York 17	NY
Bendix Corp. Systems Div.	Ann Arbor	Mich
Bear Allen Applied Research, Inc.	1021 Washington Rd, Glenview	Ill
Berwick Associates, Inc	130 E 63rd St, New York 22	NY
Bertu & Roe, Inc.	100 W Broadway, New York 13	NY
CONTROLS FOR RADIATION, INC.		
Adv Pg 189	130 Alewife Brook Pkwy. Cambridge 40	Mass
Cook Electric Co. Cook Tech Ctr.	6601 W Oakton St, Morton Grove	Ill
COSMIC RADIATION LABS., INC.		
Adv Pg 3rd Cover	1645 Montauk Hwy, Bellport	NY
Elasco Services Inc.	2 Rector St, New York 6	NY
EDGERTON, GERMESHAUSEN & GRIER, INC.		
Adv Pg 105	160 Brookline Ave, Boston 15	Mass
Franklin Institute Labs.	Philadelphia 3	Pa
FRANKLIN SYSTEMS, INC. Adv Pg 236	2724 Wilshire Rd, W Palm Beach	Fla
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.		
Adv Pg 202	Box 608, San Diego 12	Cal
General Dynamics/Convair	Box 80773, San Diego 12	Cal
General Dynamics /Fort Worth	Box 748 Fort Worth 1	Tex
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
HAZLETON-NUCLEAR SCIENCE CORP.		
Adv Pg 38	4062 Fabian Way, Palo Alto	Cal
HUGHES AIRCRAFT CO. NUCLEONICS LAB.		
Adv Pg 203	Box 2097, Fullerton	Cal
INTERNUCLEAR CO., Adv Pg 240	7 N Brentwood Blvd, Clayton 5	Mo
ISO/SERVE INC., Adv Pg 88	131 Portland St, Cambridge 39	Mass
Isotopes Specialties Co.	Box 688, Burbank	Cal
KAMAN AIRCRAFT CORP. TEXAS BIO-NUCLEAR DIV.,		
Adv Pg 215	Box 9431, Austin 17	Tex
KAMAN NUCLEAR, Adv. Pgs. 190, 191	Garden of the Gods Rd, Colo Springs	Colo
Lockheed Aircraft Corp. Georgia Div.	1500 Northside Dr, NW, Atlanta 18	Ga
Malmker Lab Inc	191 Mill Lane, Mountainside	NJ
Marquardt Corp	16555 Saticoy St, Van Nuys	Cal
National Research Corp	70 Memorial Dr, Cambridge 42	Mass
Neutron Products, Inc	1007 Thos. Jefferson St NW, Wash 7	DC
Nuclear Consultants Corp.	8062 Manchester Rd, St. Louis 19	Mo
Nuclear Research Associates, Inc.	30-16 Hunters Pt. Ave, LIC 1	NY
Nuclear Science & Engineering Corp.	Box 10901, Pittsburgh 36	Pa
NUCLEAR UTILITY SERVICES, INC.,		
Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
Pickard-Warren-Lowe Assoc.	1025 Conn. Ave, NW, Washington 6	DC
Quantum, Inc	Lafferty Ave, Wallingford	Conn
Radiation Applications, Inc.	36-40 37th St, Long Island City 1	NY
Radiation Dynamics Inc.	Westbury Ind. Pk, Westbury	NY
RADIATION TECHNOLOGY, INC.		
Adv. Pg. 3rd Cover	437 Antone St. NW, Atlanta 18	Ga
ROYAL RESEARCH CORP. Adv Pg 27	21824 Dublin Blvd, Hayward	Cal
S.E.R.A.L. Adv Pg 113-J	1091 chaussee d'Alsemberg, Brussels 18	Belg
TRG, Inc	2 Aerial Way, Syosset	NY
Tracerlab Reactor Monitoring Center	2030 Wright Ave, Richmond	Cal
TRACERLAB, INC. Adv. Pgs. 134, 113-3	1601 Trapelo Rd, Waltham 54	Mass
U. S. NUCLEAR CORP., Adv Pg 127	881 W Lake St, Box 2022, Burbank	Cal
Western Radiation Lab.	1107 W 24th St, Los Angeles 7	Cal

SERV. & CONS'LT: RADIATION-FIELD EVALUATION

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave, Greenwich	Conn
Admiral Corp.	3800 W Cortland St, Chicago 47	Ill
Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Aerojet Div Aerojet-General Corp	6352 N Citrus Ave, Covina	Cal
Alco Products, Inc.	Box 1065, Schenectady 5	NY
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV.,		
Adv. Pgs. 115, 231	Box 93, Ottawa, Ont	Can
Atomics International Div. NAA Inc.	Box 309, Canoga Park	Cal
Berwick Associates, Inc	130 E 63rd St, New York 22	NY
Bertu & Roe, Inc.	100 W Broadway, New York 13	NY
CONTROLS FOR RADIATION, INC.		
Adv Pg 189	130 Alewife Brook Pkwy. Cambridge 40	Mass
COSMIC RADIATION LABS., INC.		
Adv Pg 3rd Cover	1645 Montauk Hwy, Bellport	NY
EDGERTON, GERMESHAUSEN & GRIER, INC.		
Adv Pg 105	160 Brookline Ave, Boston 15	Mass
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
General Dynamics /Fort Worth	Box 748 Fort Worth 1	Tex
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
HAZLETON-NUCLEAR SCIENCE CORP.		
Adv Pg 38	4062 Fabian Way, Palo Alto	Cal
INTERNUCLEAR CO., Adv Pg 240	7 N Brentwood Blvd, Clayton 5	Mo
ISO/SERVE INC., Adv Pg 88	131 Portland St, Cambridge 39	Mass
KAMAN NUCLEAR, Adv. Pgs. 190, 191	Garden of the Gods Rd, Colo Springs	Colo
Lockheed Aircraft Corp. Georgia Div.	1500 Northside Dr, NW, Atlanta 18	Ga
Malmker Lab Inc	191 Mill Lane, Mountainside	NJ
Nuclear Consultants Corp.	8062 Manchester Rd, St. Louis 19	Mo
Nuclear Science & Engineering Corp.	Box 10901, Pittsburgh 36	Pa
Chemat Corp.	2208 Bogen St, Cincinnati 22	Ohio
Pickard-Warren-Lowe Assoc.	1025 Conn. Ave, NW, Washington 6	DC
Quantum, Inc	Lafferty Ave, Wallingford	Conn
Radiation Control Inc.	6343 S Kenilyl Ave, Chicago 17	Ill
RADIATION TECHNOLOGY, INC.		
Adv. Pg. 3rd Cover	437 Antone St. NW, Atlanta 18	Ga
Telechrome Mfg. Corp.	186 Direx Ave, Amityville	NY
TRACERLAB, INC. Adv. Pgs. 134, 113-3	1601 Trapelo Rd, Waltham 54	Mass
U. S. NUCLEAR CORP., Adv Pg 127	881 W Lake St, Box 2022, Burbank	Cal
Western Radiation Lab.	1107 W 24th St, Los Angeles 7	Cal

SERV. & CONS'LT: RADIATION-INSTRUMENT CALIBRATION

Admiral Corp.	3800 W Cortland St, Chicago 47	Ill
Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Alco Products, Inc.	Box 1065, Schenectady 5	NY
Automatic-Barnstead Corp	111 W Jewel Ave, St. Louis 22	Mo
Bendix Friesen U.K. Ltd.	High Church St, New Basford, Nott.	Eng
Berwick Associates, Inc	130 E 63rd St, New York 22	NY
CONTROLS FOR RADIATION, INC.		
Adv Pg 189	130 Alewife Brook Pkwy. Cambridge 40	Mass
Cook Electric Co. Cook Tech Ctr.	6601 W Oakton St, Morton Grove	Ill
COSMIC RADIATION LABS., INC.		
Adv Pg 3rd Cover	1645 Montauk Hwy, Bellport	NY
D. I. S. I. Nuclear Corp.	Via A. Bordoni 90, Milan	Ital
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
HAZLETON-NUCLEAR SCIENCE CORP.		
Adv Pg 38	4062 Fabian Way, Palo Alto	Cal
Isotopes Specialties Co.	Box 688, Burbank	Cal
JOHNSON & ASSOCIATES, INC., WILLIAM R.,		
Adv Pg 226	Box 418, Mountain Lakes	NJ
LANDAUER, JR. & CO., R. S. Adv Pg 12	3930 216th St, Sauntown	Ill
LIONEL ELECTRONIC LABS.		
Adv Pg 216	1226 Flushing Ave, Brooklyn 37	NY
Lockheed Aircraft Corp. Georgia Div.	1500 Northside Dr, NW, Atlanta 18	Ga
Malmker Lab Inc	191 Mill Lane, Mountainside	NJ
Nuclear Consultants Corp.	8062 Manchester Rd, St. Louis 19	Mo
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC)		
Adv. Pgs. 217, 219, 221	1800 Warren St, Apollo	Pa
Nuclear Science & Engineering Corp.	Box 10901, Pittsburgh 36	Pa
NUCLEONIC CORP. OF AMERICA,		
Adv Pg 203	196 Degraw St, Brooklyn 31	NY
Chemat Corp.	2208 Bogen St, Cincinnati 22	Ohio
Quantum, Inc	Lafferty Ave, Wallingford	Conn
RCA SERVICE CO. NUCLEAR & SCIENTIFIC SERVICES,		
Adv Pg 31	Cherry Hill, Delaware Tp. Camden 7	NJ
RADIATION COUNTER LABS. INC.		
Adv. Pgs. 82, 83	5123 W Grove St, Skokie	Ill
RADIATION TECHNOLOGY, INC.		
Adv. Pg. 3rd Cover	437 Antone St. NW, Atlanta 18	Ga
Radiochemistry, Inc	1111 W St. Catherine St, Louisville 10	Ky
Southeastern Atomic Labs. Inc.	4220 Bay to Bay Blvd, Tampa 9	Fla
Telechrome Mfg. Corp.	186 Direx Ave, Amityville	NY
Texas Nuclear Corp.	Box 8987, Allandale Sta, Austin 17	Tex
TRACERLAB, INC. Adv. Pgs. 134, 113-5	1601 Trapelo Rd, Waltham 54	Mass
U. S. NUCLEAR CORP., Adv Pg 127	881 W Lake St, Box 2022, Burbank	Cal
VICTOREEN INSTRUMENT CO.,		
Adv. Pg. 4th Cover	5806-11 Hough Ave, Cleveland 3	Ohio
Western Radiation Lab.	1107 W 24th St, Los Angeles 7	Cal

SERV. & CONS'LT: RADIOCHEMICAL

Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Alco Products, Inc.	Box 1065, Schenectady 5	NY
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV.,		
Adv. Pgs. 115, 231	Box 93, Ottawa, Ont	Can
ATOMIC RESEARCH LAB. DIV. ATOMIC CORP. OF AMERICA,		
Adv Pg 184	14723 Aminoa St, Panorama City	Cal
Bear Allen Applied Research, Inc.	1021 Washington Rd, Glenview	Ill
Berwick Associates, Inc	130 E 63rd St, New York 22	NY
California Corp for Biochemical Research	3825 Medford St, Los Angeles 63	Cal
Chemical Separations Corp.	Box 1931, Oak Ridge	Tenn
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
CONTROLS FOR RADIATION, INC.		
Adv Pg 189	130 Alewife Brook Pkwy. Cambridge 40	Mass
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.		
Adv Pg 202	Box 608, San Diego 12	Cal
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
HAZLETON-NUCLEAR SCIENCE CORP.		
Adv Pg 38	4062 Fabian Way, Palo Alto	Cal
ISO/SERVE INC., Adv Pg 88	131 Portland St, Cambridge 39	Mass
ISOTOPES INC., Adv Pg 192	123 Woodland Ave, Westwood	NJ
Isotopes Specialties Co.	Box 688, Burbank	Cal
KAMAN AIRCRAFT CORP. TEXAS BIO-NUCLEAR DIV.,		
Adv Pg 215	Box 9431, Austin 17	Tex
LIONEL ELECTRONIC LABS.		
Adv Pg 216	1226 Flushing Ave, Brooklyn 37	NY
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lockheed Aircraft Corp. Georgia Div.	1500 Northside Dr, NW, Atlanta 18	Ga
Malmker Lab Inc	191 Mill Lane, Mountainside	NJ
N.A.A., Adv Pg 59	Box 732, State College	Pa
Nuclear Consultants Corp.	8062 Manchester Rd, St. Louis 19	Mo
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC)		
Adv. Pgs. 217, 219, 221	1800 Warren St, Apollo	Pa
Nuclear Metals, Inc.	Box 222 Concord	Mass
Nuclear Research Associates, Inc.	30-16 Hunters Pt. Ave, LIC 1	NY
Nuclear Research Chemicals, Inc.	160 N Crystal Lake Dr, Orlando	Fla
Nuclear Science & Engineering Corp.	Box 10901, Pittsburgh 36	Pa
NUCLEAR UTILITY SERVICES, INC.,		
Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
Quantum, Inc.	Lafferty Ave, Wallingford	Conn
Radiation Detection Co.	4047-49 Transport St, Palo Alto	Cal
Radiochemistry, Inc.	1111 W St. Catherine St, Louisville 10	Ky
ROYAL RESEARCH CORP. Adv Pg 27	21824 Dublin Blvd, Hayward	Cal
S.E.R.A.L. Adv Pg 113-J	1091 chaussee d'Alsemberg, Brussels 18	Belg
Tracerlab Reactor Monitoring Center	2030 Wright Ave, Richmond	Cal

U. S. NUCLEAR CORP., Adv Pg 127 ..... 801 N Lake St. Box 2802, Burbank ..... Cal
Volk Radiochemical Co. ..... 8260 Elmwood Ave, Skokie Ill
WESTINGHOUSE TESTING REACTOR,
Adv. Pgs. 190 & 70, 71 ..... Box 1089, Pittsburgh 30 ..... Pa

SERV. & CONS'LT: RADIOGRAPHY

Aerojet-General Nucleonics ..... Box 77, San Ramon ..... Cal
Alco Products, Inc. ..... Box 1005, Schenectady 5 ..... NY
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV.,
Adv. Pgs. 115, 221 ..... Box 93, Ottawa, Ont ..... Can
Bonney-Floyd Co. ..... 811 Morton St. Columbus 7 ..... Ohio
California Corp for Biochemical Research ..... 3855 Medford St. Los Angeles 63 ..... Cal
Combustion Engineering, Inc. ..... 200 Madison Ave, New York 16 ..... NY
DRESSER PRODUCTS, INC. Adv Pg 200 ..... Grove Burlington ..... Mass
EDERLINE INSTRUMENT CORP.
Adv Pg 115 ..... Box 270, Santa Fe ..... Mo
FORRO SCIENTIFIC CO. Adv Pg 234 ..... 833 Lincoln St. Evanston Ill
Gamma Industrie ..... 82 Rue de Dunkerque, Paris 9, France
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ..... 1 River Rd. Schenectady 5 ..... NY
Industrial X-Ray & Research, Inc. ..... 600 Second St. Muskegon ..... Mich
Jun Pennsylvania Mfg. Corp ..... 6 Warren Dr. Norwich ..... Mass
Knapp Mills Inc. ..... 50-15 Borden Ave, LIC ..... NY
Meinzer Lab Inc ..... 191 Mill Lane, Mountainside ..... NJ
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.
Adv Pg 3 ..... Box 896, Attleboro ..... Mass
Mutual Boiler & Machy Insurance Co. ..... 225 Wyman St, Waltham 54 ..... Mass
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),
Adv. Pgs. 207, 219, 221 ..... 1000 Vermo St. Apollo ..... Pa
Nuclear Science & Engineering Corp. ..... Box 10801, Pittsburgh 36 ..... Pa
Pantasote Ltd. ..... 6A Princes St, Hanover Sq, London W1, Eng
St. John X-Ray Laboratory ..... Califon ..... NJ
Speery Products Co. ..... Shelter Rock Rd, Danbury ..... Conn
Steiner Dev. Ltd. ..... Waterdhu ..... Swit
TOKYO SHIBAURA ELECTRIC CO. LTD.
Adv Pg 225 ..... 72 Yanaka-cho 1-Chome, Chiyoda-ku, Tokyo ..... Jap
UNITED NUCLEAR CORP., Adv Pg 36 ..... 563 Westconnor Ave, New Haven 4 ..... Conn
Vickers Armstrong (S Marcus) Ltd. ..... Swindon, Wiltshire ..... Eng

SERV. & CONS'LT: RADIOISOTOPE ANALYSIS

Aerojet-General Nucleonics ..... Box 77, San Ramon ..... Cal
Alco Products, Inc. ..... Box 1005, Schenectady 5 ..... NY
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV.,
Adv. Pgs. 115, 221 ..... Box 93, Ottawa, Ont ..... Can
Beckle Science U.K. Ltd. ..... High Church St, New Bradwell, Bucks ..... Eng
Bio-Science Labs. ..... 12200 Santa Monica Blvd, L A 25 ..... Cal
Beckwith Associates, Inc ..... 130 E 63rd St, New York 22 ..... NY
California Corp for Biochemical Research ..... 3855 Medford St. Los Angeles 63 ..... Cal
Combustion Engineering, Inc. ..... 200 Madison Ave, New York 16 ..... NY
CONTROLS FOR RADIATION, INC.
Adv Pg 189 ..... 130 Alewife Brook Pkwy Cambridge 40 ..... Mass
D.I.S.I. Nuclear Corp. ..... Via A. Bonfant 30, Milan ..... Ital
Franklin Institute Labs. ..... Philadelphia 3 ..... Pa
Gamma Industrie, Inc. ..... Box 2565, Baton Rouge ..... La
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.
Adv Pg 202 ..... Box 608, San Diego 12 ..... Cal
General Dynamics /Fort Worth ..... Box 748, Fort Worth 1 ..... Tex
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ..... 1 River Rd. Schenectady 5 ..... NY
HAZLETON-NUCLEAR SCIENCE CORP.
Adv Pg 38 ..... 4863 Fabian Way, Palo Alto ..... Cal
Institut for Atomenergi ..... Box 170, Lillestrom, Kjeller ..... Nor
ISO/SERVE INC., Adv Pg 60 ..... 131 Portland St. Cambridge 39 ..... Mass
ISOTOPES INC., Adv Pg 192 ..... 123 Vandford Ave. Westwood ..... NJ
Isotopes Specialties Co. ..... Box 608, Burbank ..... Cal
KAMAN AIRCRAFT CORP. TEXAS DIV-NUCLEAR DIV.,
Adv Pg 215 ..... Box 9431, Austin 17 ..... Tex
Knapp Mills, Inc. ..... 50-15 Borden Ave, LIC 1 ..... NY
Lab. Prof. Dr. R. Berthold ..... 57 Calmbacherstr, Wildbad im Schwarzwald ..... Ger
L'Electronique Appliquee ..... 55 rue de Docteur Finlay, Paris 15, Fr
Lockheed Aircraft Corp ..... Box 551, Burbank ..... Cal
Lockheed Aircraft Corp. Georgia Div. ..... 1600 Northside Dr. NW, Atlanta 18 ..... Ga
Meinzer Lab Inc ..... 191 Mill Lane, Mountainside ..... NJ
Marquardt Corp. ..... 16555 Saticoy St. Van Nuys ..... Cal
MARTIN CO. NUCLEAR DIV. Adv Pg 5 ..... Baltimore 3 ..... Md
METTLER, INC. Adv Pg 39 ..... Box 335, Hartford Ill
Nouvem Products, Inc ..... 1097 Thos. Jefferson St NW, Wash 7 ..... DC
Nuclear-Chemicals Corp. ..... 1042 Manchester Rd, St. Louis 18 ..... Mo
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),
Adv. Pgs. 207, 219, 221 ..... 1000 Vermo St. Apollo ..... Pa
Nuclear Research Associates, Inc. ..... Bell St. Reigate (Surrey) ..... Eng
Nuclear Research Associates, Inc. ..... 50-15 Borden Pl. Ave. LIC 1 ..... NY
Nuclear Research Chemicals, Inc. ..... 109 N Crystal Lake Dr, Orlando ..... Fla
Nuclear Science & Engineering Corp. ..... Box 10801, Pittsburgh 36 ..... Pa
NUCLEONIC CORP OF AMERICA,
Adv Pg 212 ..... 196 Dupont St. Brooklyn 31 ..... NY
Ohmart Corp. ..... 2330 Rogers St, Cincinnati 22 ..... Ohio
Ontario Research Foundation ..... 43 Queen's Park, Toronto 5, Ont Canada
Pantasote Ltd. ..... 6A Princes St, Hanover Sq, London W1, Eng
Petersen Jr., Harold T. ..... 201 Fowler Bldg, Princeton ..... NJ
Quantum, Inc. ..... Lefbury Ave, Wallingford ..... Conn
Radiation Applications, Inc. ..... 20-40 37th St, Long Island City 1 ..... NY
RADIATION COUNTER LABS. INC.
Adv. Pgs. 82, 83 ..... 5122 W Grove St. Skokie Ill
RADIATION TECHNOLOGY, INC.
Adv. Pg. 3rd Cover ..... 657 Antone St. NW, Atlanta 18 ..... Ga
Radiochemistry, Inc. ..... 1111 W St. Catherine St, Louisville 10 ..... Ky
ROYAL RESEARCH CORP. Adv Pg 21 ..... 11024 Dublin Blvd. Hayward ..... Cal
S. A. L. P. ..... 38 Rue Gabriel Crie, Maisons-Alfort, Seine ..... Fr
S.E.R.A.I., Adv Pg 113-J ..... 1091 chaussee d'Alsemberg, Brussels 18 ..... Belg
St. John X-Ray Laboratory ..... Califon ..... NJ
TRG, Inc ..... 3 Aerial Way, Syosset ..... NY
TOKYO SHIBAURA ELECTRIC CO. LTD.
Adv Pg 225 ..... 72 Yanaka-cho 1- Chome, Chiyoda-ku, Tokyo ..... Jap
TRACERLAB, INC. Adv. Pgs. 126, 133-6 ..... 1601 Trapelo Rd. Waltham 54 ..... Mass
UNITED NUCLEAR CORP., Adv Pg 36 ..... 563 Westconnor Ave, New Haven 4 ..... Conn
U. S. NUCLEAR CORP., Adv Pg 127 ..... 801 N Lake St. Box 2802, Burbank ..... Cal
Volk Radiochemical Co. ..... 8260 Elmwood Ave, Skokie Ill

SERV. & CONS'LT: REACTOR COMPONENTS-DESIGN

AMF ATOMICS, Adv. Pgs. 76, 77, 99 ..... 140 Greenwich Ave, Greenwich ..... Conn
Advanced Technology Labs. ..... 380 Whisman Rd. Mountain View ..... Cal
Aerojet-General Nucleonics ..... Box 77, San Ramon ..... Cal
Aerotec Industries Inc. Control Equip. Div. ..... County Ave, Greenwich ..... Conn
Aerojet Dtv Aerojet-General Corp ..... 410 N Citrus Ave, Covina ..... Cal
Alco Products, Inc. ..... Box 1005, Schenectady 5 ..... NY
ALLIS-CHALMERS MFG. CO.,
Adv. Pgs. 109-111 ..... 1126 S 70th St. Milwaukee ..... Wis
ASTRA, INC., Adv Pg 64 ..... Box 226, Raleigh ..... NC
Atomics International Div. NAA Inc. ..... Box 309, Canoga Park ..... Cal
AUTOCLAVE ENGINEERS, INC.,
Adv Pg 209 ..... 2930 W 22nd St. Erie ..... Pa
Auto-Atome ..... 11 rue de la Pepiniere, Paris 8e ..... Fr
Baldwin-Lima-Hamilton Corp. ..... Dept. N 8, Philadelphia 42 ..... Pa
BABCOCK & WILCOX CO.
Adv. Pgs. 34, 35 ..... 161 E 42 St. New York 17 ..... NY
Babcock & Wilcox Ltd. ..... 209 Euston Rd, London NW 1 ..... Eng
Bamco & Reinecke, Inc. ..... 520 E Ohio St, Chicago 11 Ill
Beckle Science U.K. Ltd. ..... High Church St, New Bradwell, Bucks ..... Eng
Betts & Son, Inc. ..... 100 W Broadway, New York 13 ..... NY
Canadian General Electric Co Ltd. ..... 107 Park St, Peterborough, Ont. ..... Can
Carreau ..... 17 Bvd de la Libération, St.Denis, Seine ..... Fr
Combustion Engineering, Inc. ..... 200 Madison Ave, New York 16 ..... NY
Dilworth, Secord, Meagher & Assoc. Ltd. ..... 4314 Dundas St. W, Toronto, Ont. ..... Can
Dynatech Corp. ..... 600 Massachusetts Ave, Cambridge 39 ..... Mass
Elanco Services Inc. ..... 2 Rector St. New York 6 ..... NY
Electric Boat Div. Gen. Dynamics Corp. ..... Industrial Services Dept. 600, Groton ..... Conn
FOSTER WHEELER CORP. Adv Pg 130 ..... 165 5th Ave. New York 10 ..... NY
Franklin Institute Labs. ..... Philadelphia 3 ..... Pa
General Dynamics/Convair ..... Box 20775, San Diego 12 ..... Cal
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ..... 1 River Rd. Schenectady 5 ..... NY
General Nuclear Engineering Corp. ..... Box 845, Gainesville ..... Fla
Interatom, Internat. Atomreaktorbau Gmbh. ..... Bensberg/Konln, Postfach ..... Ger
INTERNUCLEAR CO., Adv Pg 240 ..... 7 N Brentwood Blvd. Clayton 5 ..... Mo
Irvin & Partners Ltd., E. G. ..... 118 Southwark St. London SE1 ..... Eng
KAISER ENGINEERS, Adv Pg 95 ..... 300 Lakeside Dr. Oakland 12 ..... Cal
Lockheed Aircraft Corp. Georgia Div. ..... 1600 Northside Dr. NW, Atlanta 18 ..... Ga
Meinzer Lab Inc ..... 191 Mill Lane, Mountainside ..... NJ
Marquardt Corp ..... 16555 Saticoy St. Van Nuys ..... Cal
MARTIN CO. NUCLEAR DIV. Adv Pg 5 ..... Baltimore 3 ..... Md
MIRATRON, N. Y., Adv Pg 113-F ..... Hawthorne 36, The Hague ..... Neth
Nouvem Products, Inc ..... 1097 Thos. Jefferson St NW, Wash 7 ..... DC
Nouhem Research & Eng. Corp. ..... 200 Main St. Cambridge ..... Mass
Nuclear Technology Corp ..... 66 Church St. White Plains ..... NY
NUCLEAR UTILITY SERVICES, INC.,
Adv Pg 7 ..... 1603 Connecticut Ave. N W, Wash 6 ..... DC
Oswald Engineer Ltd. ..... Box 4015 Term A, Toronto ..... Can
Pickard-Warren-Lowe Assoc. ..... 1025 Conn. Ave. NW, Washington 6 ..... DC
Planny Reclamation Ltd. ..... Wessiter Rd. Northampton ..... Eng
RCA SERVICE CO. NUCLEAR & SCIENTIFIC SERVICES,
Adv Pg 21 ..... Cherry Hill, Delaware Tp. Camden 7 ..... NJ
Reactor Controls Co. ..... Box 457, Oak Ridge ..... Tenn
Schonfeldt, David M. ..... New Canaan ..... Conn
Simmering-Graz-Pauker AG ..... Simmeringer Haupt. 38, Vienna 7 ..... Aus
SYLCOR DIV. SYLVANIA ELEC PRODS. INC.
Adv Pg 26 ..... Centrogen Rank Rd. Hicksville ..... NY
TRG, Inc ..... 3 Aerial Way, Syosset ..... NY
Tapco Div. Thompson Ramo Wooldridge Inc. ..... 23555 Euclid Ave, Cleveland 17 ..... Ohio
UNITED NUCLEAR CORP., Adv Pg 36 ..... 563 Westconnor Ave. New Haven 4 ..... Conn
Vickers Armstrong (S Marcus) Ltd. ..... Swindon, Wiltshire ..... Eng
Western Nuclear Corp. ..... Box 1305, Idaho Falls ..... Idaho
WESTINGHOUSE ELEC. CORP. ATOMIC EQUIPMENT DEPT.
Adv. Pgs. 18, 19 & 70, 71 ..... Cheswick ..... Pa
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.
Adv. Pgs. 70, 71 ..... Box 355, Pittsburgh 30 ..... Pa
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. SECT.
Adv. Pgs. 70, 71 ..... Pittsburgh ..... Pa

SERV. & CONS'LT: REACTOR CONTROL SYSTEMS-DESIGN

AMF ATOMICS, Adv. Pgs. 76, 77, 99 ..... 140 Greenwich Ave. Greenwich ..... Conn
Advanced Technology Labs. ..... 380 Whisman Rd. Mountain View ..... Cal
Aerojet-General Nucleonics ..... Box 77, San Ramon ..... Cal
Aerotec Dtv Aerojet-General Corp ..... 410 N Citrus Ave, Covina ..... Cal
Alco Products, Inc. ..... Box 1005, Schenectady 5 ..... NY
ALLIS-CHALMERS MFG. CO.,
Adv. Pgs. 109-111 ..... 1126 S 70th St. Milwaukee ..... Wis
ASTRA, INC., Adv Pg 64 ..... Box 226, Raleigh ..... NC
Atomics International Div. NAA Inc. ..... Box 309, Canoga Park ..... Cal
Automatic Control Engg. Ltd. ..... Bexley Pl. Longcroft Rd, London SW8 ..... Eng
Auto-Atome ..... 11 rue de la Pepiniere, Paris 8e ..... Fr
BABCOCK & WILCOX CO.
Adv. Pgs. 34, 35 ..... 161 E 42 St. New York 17 ..... NY
Beckle Corp. Cincinnati Div. ..... 1130 Wasson Rd. Cincinnati 8 ..... Ohio
Bower-Allen Applied Research, Inc. ..... 1021 Washington Bd. Glenview Ill
Betts & Son, Inc. ..... 100 W Broadway, New York 13 ..... NY
Canadian General Electric Co Ltd. ..... 107 Park St, Peterborough, Ont. ..... Can
Carreau ..... 17 Bvd de la Libération, St.Denis, Seine ..... Fr
Dynamics Inc. Control Systems Div. ..... 4455 Miramar Rd. La Jolla ..... Cal
Dilworth, Secord, Meagher & Assoc. Ltd. ..... 4314 Dundas St. W, Toronto, Ont. ..... Can
Dynatech Corp. ..... 600 Massachusetts Ave, Cambridge 39 ..... Mass
Elanco Services Inc. ..... 2 Rector St. New York 6 ..... NY
EDGERTON, GERMESHAUSEN & GRIER, INC.
Adv Pg 105 ..... 160 Brookline Ave. Boston 15 ..... Mass
Electric Boat Div. Gen. Dynamics Corp. ..... Industrial Services Dept. 600, Groton ..... Conn
EX-CELLO CORP. ATOMICS DIV.
Adv. Pgs. 8, 9 ..... 1200 Gratiot Blvd. Detroit 32 ..... Mich
Franklin Institute Labs. ..... Philadelphia 3 ..... Pa
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.
Adv Pg 202 ..... Box 608, San Diego 12 ..... Cal
General Dynamics/Electronics ..... 100 Carlton Rd, Rochester 3 ..... NY
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ..... 1 River Rd. Schenectady 5 ..... NY

NUCLEAR AND ALLIED PRODUCTS

General Nuclear Engineering Corp.	Box 845, Dunedin	Fla
Interatom, Internat. Atomenergie Gmbh	Bensberg/Konln, Postfach	Ger
INTERNUCLEAR CO., Adv Pg 240	7 N Brentwood Blvd. Clayton 5	Mo
KAISER ENGINEERS, Adv Pg 95	300 Lakeside Dr. Oakland 12	Cal
Leeds & Northrup Ltd.	Broad St. Birmingham 15	Eng
Lockheed Aircraft Corp. Georgia Div.	1500 Northside Dr. NW, Atlanta 18	Ga
Mitr, Inc., Chin. T.	80 Federal St, Boston 10	Mass
Malaiter Lrhn Inc	191 Mill Lane, Mountainside	NJ
Marquardt Corp	16555 Saticoy St, Van Nuys	Cal
Metals Research Laboratory	1027 Bay Rd, East Palo Alto	Cal
MINN-HONEYWELL REG'CO. INDL PRODS GROUP, Adv. Pgs. 126, 240	Wayne & Windrim Aves. Phila. 44	Pa
Monitor Systems Inc.	Dept. 7, Ft. Wash. Ind. Pk. Ft. Wash.	Pa
Northern Research & Eng. Corp.	230 Main St. Cambridge	Mass
Nuclear Technology Corp	56 Church St, White Plains	NY
NUCLEAR UTILITY SERVICES, INC., Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 187	Eindhoven	Neth
RCA SERVICE CO. NUCLEAR & SCIENTIFIC SERVICES, Adv Pg 31	Cherry Hill, Delaware Tp. Camden 8	NJ
Reactor Controls Co.	Box 4371, Oak Ridge	Tenn
Reflectone Instruments Systems Inc.	275 N Union St, Rochester 5	NY
RUCKER CO., THE, Adv Pg 197	4700 San Pablo Ave. Oakland 8	Cal
Schultz, M. A.	530 William Penn Pl, Pittsburgh 30	Pa
Standard Tel. & Cables Ltd.	29 Glasshouse Yd, London EC 1	Eng
STEARNS-ROGER MFG. CO. Adv Pg 32	Box 5888, Denver 17	Colo
TRG, Inc	2 Aerial Way, Syosset	NY
Tapco Div. Thompson Ramo Wooldridge Inc.	23555 Euclid Ave, Cleveland 17	Ohio
TECHNICAL MEASUREMENT CORP. Adv Pg 63	461 Washington Ave. North Haven	Conn
THOMSON-HOUSTON (THE FRANCAISE), Adv Pg 112-D	173 Blvd. Haussmann, Paris 8	Fr
UNITED NUCLEAR CORP., Adv Pg 36	363 Winchester Ave. New Haven 4	Conn
United Engineers & Constructors, Inc.	1401 Arch St, Philadelphia 5	Pa
U. S. Controls, Inc	410 Fourth Ave, Brooklyn 15	NY
Vickers Armstrong (S Marston) Ltd.	Swindon, Wiltshire	Eng
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT. Adv. Pgs. 70, 71	Box 355, Pittsburgh 30	Pa
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. DEPT. Adv. Pgs. 70, 71	Pittsburgh	Pa

SERV. & CONS'LT: REACTOR DESIGN

AEG, Adv Pg 113-A	Hauptsitz, Frankfurt/Main, Germany	
AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
Advanced Technology Labs.	300 Whisman Rd. Mountain View	Cal
Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Alco Products, Inc.	Box 1086, Schenectady 5	NY
ALLIS-CHALMERS MFG. CO., Adv. Pgs. 109-111	933 S 70th St. Milwaukee 1	Wis
Associates Nucleonics Inc.	975 Stewart Ave, Garden City	NY
ASTRA, INC., Adv Pg 64	Box 238, Raleigh	NC
Atomics International Div. NAA	Box 309, Canoga Park	Cal
BABCOCK & WILCOX CO. Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Babcock & Wilcox Ltd.	209 Euston Rd, London NW 1, England	
BELGONUCLEAIRE, Adv Pg 113-L	35 rue des Colonies, Brussels 1	Belg
Burns & Roe, Inc.	100 W Broadway, New York 13	NY
Canadian General Electric Co Ltd.	107 Park St, Peterborough, Ont.	Can
Canadian Westinghouse Co. Ltd.	Box 510, Hamilton, Ontario, Canada	
Caratom	17 Bd. de la Liberation, St. Denis, Seine	Fr
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
Curtiss-Wright Corp. Princeton Div.	Box 110, Princeton	NJ
Dilworth, Secord, Meagor & Assoc. Ltd.	4316 Dundas St. W, Toronto, Ont.	Can
Dumbiant & Assoc. Inc., R. M.	836 Lafayette St. New Orleans 13	La
Ebasco Services Inc.	2 Rector St. New York 6	NY
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
Franklin Institute Labs.	Philadelphia 3	
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. Adv Pg 202	Box 608, San Diego 12	Cal
General Dynamics /Fort Worth	Box 748 Fort Worth 1	Tex
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Nuclear Engineering Corp.	Box 845, Dunedin	Fla
Hitachi, Ltd	1-6-Uchi Marunouchi, Chiyoda-ku, Tokyo	Jap
Interatom, Internat. Atomenergie Gmbh	Bensberg/Konln, Postfach	Ger
INTERNUCLEAR CO., Adv Pg 240	7 N Brentwood Blvd. Clayton 5	Mo
KAISER ENGINEERS, Adv Pg 95	300 Lakeside Dr. Oakland 12	Cal
Kuhlmann, Ets.	25 bd de l'Amiral-Bruix, Paris 16e	Fr
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lockheed Aircraft Corp. Georgia Div.	1500 Northside Dr. NW, Atlanta 18	Ga
Mc Lain Bridger Associates	821 60th Pl, Downers Grove	Ill
Malaiter Lrhn Inc	191 Mill Lane, Mountainside	NJ
Marquardt Corp.	16555 Saticoy St, Van Nuys	Cal
MARTIN CO. NUCLEAR DIV. Adv Pg 5	Baltimore 3	Md
Nucleon Products, Inc	1007 Thos. Jefferson St NW, Wash 7	DC
New York Shipbuilding Corp.	Camden 1	NJ
Northern Research & Eng. Corp.	230 Main St, Cambridge	Mass
Nuclear Power Group	Knutsford, Cheshire	Eng
Nuclear Technology Corp	55 Church St, White Plains	NY
NUCLEAR UTILITY SERVICES, INC., Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
Siemens Schuckertwerke AG	Werner-von-Siemens Str, 50, Erlangen	Ger
SOCIETE RATEAU, Adv Pg 112-T	Rue Rateau La Courneuve, Seine	Fr
Sulzer Bros. Ltd.	Winterthur	Switz
TRG, Inc.	2 Aerial Way, Syosset	NY
UNITED NUCLEAR CORP., Adv Pg 36	363 Winchester Ave. New Haven 4	Conn
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT. Adv. Pgs. 70, 71	Box 355, Pittsburgh 30	Pa

SERV. & CONS'LT: REACTOR ECONOMICS

AEG, Adv Pg 113-A	Hauptsitz, Frankfurt/Main, Germany	
AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
Advanced Technology Labs.	300 Whisman Rd. Mountain View	Cal
Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Alco Products, Inc.	Box 1086, Schenectady 5	NY
ALLIS-CHALMERS MFG. CO., Adv. Pgs. 109-111	933 S 70th St. Milwaukee	Wis
Associates Nucleonics Inc.	975 Stewart Ave, Garden City	NY
ASTRA, INC., Adv Pg 64	Box 238, Raleigh	NC
Atomics International Div. NAA	Box 309, Canoga Park	Cal
BABCOCK & WILCOX CO. Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Bechtel Corp.	220 Bush St. San Francisco 4	Cal
BELGONUCLEAIRE, Adv Pg 113-L	35 rue des Colonies, Brussels 1	Belg
Bocar-Allen Applied Research, Inc.	1031 Washington Rd. Glenview	Ill
Burns & Roe, Inc.	100 W Broadway, New York 13	NY
Canadian General Electric Co Ltd.	107 Park St, Peterborough, Ont.	Can
Canadian Westinghouse Co. Ltd.	Box 510, Hamilton, Ontario, Canada	
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
Curtiss-Wright Corp. Princeton Div.	Box 110, Princeton	NJ
Ebasco Services Inc.	2 Rector St, New York 6	NY
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
Ewbank & Partners Ltd.	11 Greenwood Pl, London, SW 1, Eng	
Franklin Institute Labs.	Philadelphia 3	Pa
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. 4-7, Adv Pg 202	Box 608, San Diego 12	Cal
General Dynamics /Fort Worth	Box 748 Fort Worth 1	Tex
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Nuclear Engineering Corp.	Box 845, Dunedin	Fla
Interatom, Internat. Atomenergie Gmbh	Bensberg/Konln, Postfach	Ger
INTERNUCLEAR CO., Adv Pg 240	7 N Brentwood Blvd. Clayton 5	Mo
KAISER ENGINEERS, Adv Pg 95	300 Lakeside Dr. Oakland 12	Cal
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lockheed Aircraft Corp. Georgia Div.	1500 Northside Dr. NW, Atlanta 18	Ga
Mc Lain Bridger Associates	821 60th Pl, Downers Grove	Ill
Malaiter Lrhn Inc	191 Mill Lane, Mountainside	NJ
Marquardt Corp.	16555 Saticoy St, Van Nuys	Cal
Mors and McLellan	McDhurst, Glos., Surrey, England	
Nucleon Products, Inc	1007 Thos. Jefferson St NW, Wash 7	DC
Northern Research & Eng. Corp.	230 Main St, Cambridge	Mass
Nuclear Technology Corp	56 Church St, White Plains	NY
NUCLEAR UTILITY SERVICES, INC., Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
Pickard-Warner-Lowe Assoc.	1025 Conn Ave, NW, Wash 6	DC
S.E.R.A.I., Adv Pg 113-J	1091 chaussee d'Alsemberg, Beusselle 18	Belg
Sargent & Lundy	140 S Dearborn St, Chicago 3	Ill
SOCIETE RATEAU, Adv Pg 112-T	Rue Rateau La Courneuve, Seine	Fr
Stanley Engineering Co.	Hershey Blvd, Muscatine	Iowa
TRG, Inc	2 Aerial Way, Syosset	NY
UNITED NUCLEAR CORP., Adv Pg 36	363 Winchester Ave. New Haven 4	Conn
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT. Adv. Pgs. 70, 71	Box 355, Pittsburgh 30	Pa

SERV. & CONS'LT: REACTOR FUEL ELEMENTS-RESEARCH & DEVELOPMENT

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
Advanced Technology Labs.	300 Whisman Rd. Mountain View	Cal
Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Alco Products, Inc.	Box 1086, Schenectady 5	NY
ALLIS-CHALMERS MFG. CO., Adv. Pgs. 109-111	933 S 70th St. Milwaukee	Wis
Alloys Research & Mfg. Corp.	54-30 37th St, Woodside 77	NY
ASTRA, INC., Adv Pg 64	Box 238, Raleigh	NC
Atomics International Div. NAA Inc.	Box 309, Canoga Park	Cal
BABCOCK & WILCOX CO. Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Babcock & Wilcox Ltd.	209 Euston Rd, London NW 1	Eng
Canadian General Electric Co Ltd.	107 Park St, Peterborough, Ont	Can
Carborundum Co. R & D Div	New Prob. Dr. NFG, Niagara Falls	NY
Combustion Engineering, Inc.	200 Madison Ave. New York 16	NY
Curtiss-Wright Corp. Research Div.	Quehanna	Pa
Dynatech Corp.	830 Massachusetts Ave, Cambridge 39	Mass
Ebasco Services Inc.	2 Rector St. New York 6	NY
Franklin Institute Labs.	Philadelphia 3	Pa
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. Adv Pg 202	Box 608, San Diego 12	Cal
INTERNUCLEAR CO., Adv Pg 240	7 N Brentwood Blvd. Clayton 5	Mo
Kuhlmann, Ets.	25 bd de l'Amiral-Bruix, Paris 16e	Fr
Marquardt Corp	16555 Saticoy St, Van Nuys	Cal
MARTIN CO. NUCLEAR DIV. Adv Pg 5	Baltimore 3	Md
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. Adv Pg 2	Box 898, Attleboro	Mass
NATIONAL LEAD CO. Adv. Pgs. 80, 81	111 Broadway, New York 6	NY
Nucleon Products, Inc	1007 Thos. Jefferson St NW, Wash 7	DC
Nuclear Science & Engineering Corp.	Box 10861, Pittsburgh 30	Pa
NUCLEAR UTILITY SERVICES, INC., Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
Siemens, GmbH	Wolfgang am, Hanau/Main	Ger
S.E.R.A.I., Adv Pg 113-J	1091 chaussee d'Alsemberg, Beusselle 18	Belg
Sonderson & Porter	72 Wall St, New York 5	NY
SOCIETE RATEAU, Adv Pg 112-T	Rue Rateau La Courneuve, Seine	Fr
SYLCOR DIV. SYLVANIA ELEC PRODS. INC. Adv Pg 28	Costigan Rech Rd. Hicksville	NY
TRG, Inc	2 Aerial Way, Syosset	NY
UNITED NUCLEAR CORP., Adv Pg 36	363 Winchester Ave. New Haven 4	Conn
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT. Adv. Pgs. 70, 71	Box 355, Pittsburgh 30	Pa

SERV. & CONS'LT: REACTOR-HAZARD EVALUATION

AEG, Adv Pg 113-A	Hauptsitz, Frankfurt/Main, Germany	
AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
Advanced Technology Labs.	300 Whisman Rd. Mountain View	Cal
Aerojet-General Corp	4100 N Citrus Ave, Covina	Cal
Alco Products, Inc.	Box 1086, Schenectady 5	NY
ALLIS-CHALMERS MFG. CO., Adv. Pgs. 109-111	933 S 70th St. Milwaukee	Wis
Associates Nucleonics Inc.	975 Stewart Ave, Garden City	NY
ASTRA, INC., Adv Pg 64	Box 238, Raleigh	NC
Atomics International Div. NAA	Box 309, Canoga Park	Cal
BABCOCK & WILCOX CO. Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Bechtel Corp.	220 Bush St. San Francisco 4	Cal
BELGONUCLEAIRE, Adv Pg 113-L	35 rue des Colonies, Brussels 1	Belg
Bonnard & Gardel	Ave de la Gare 10, Lausanne	Switz
Burns & Roe, Inc.	100 W Broadway, New York 13	NY
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
CONTROLS FOR RADIATION, INC. Adv Pg 189	130 Alewife Brook Pkwy Cambridge 40	Mass
Curtiss-Wright Corp. Princeton Div.	Box 110, Princeton	NJ
Dynatech Corp.	830 Massachusetts Ave. Cambridge 39	Mass
Ebasco Services Inc.	2 Rector St, New York 6	NY
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
Franklin Institute Labs.	Philadelphia 3	Pa
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. Adv Pg 202	Box 608, San Diego 12	Cal
General Dynamics /Fort Worth	Box 748 Fort Worth 1	Tex
General Nuclear Engineering Corp.	Box 845, Dunedin	Fla
HAZLETON-NUCLEAR SCIENCE CORP. Adv Pg 38	4062 Fabian Way, Palo Alto	Cal
Interatom, Internat. Atomenergie Gmbh	Bensberg/Konln, Postfach	Ger
INTERNUCLEAR CO., Adv Pg 240	7 N Brentwood Blvd. Clayton 5	Mo
ISO/SERVE INC., Adv Pg 88	131 Portland St. Cambridge 39	Mass
KAISER ENGINEERS, Adv Pg 95	300 Lakeside Dr. Oakland 12	Cal
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lockheed Aircraft Corp. Georgia Div.	1500 Northside Dr. NW, Atlanta 18	Ga
Mc Lain Bridger Associates	821 60th Pl, Downers Grove	Ill
Malaiter Lrhn Inc	191 Mill Lane, Mountainside	NJ
Marquardt Corp.	16555 Saticoy St, Van Nuys	Cal
MARTIN CO. NUCLEAR DIV. Adv Pg 5	Baltimore 3	Md
Mors and McLellan	McDhurst, Glos., Surrey, England	
Nucleon Products, Inc	1007 Thos. Jefferson St NW, Wash 7	DC
Nuclear Science & Engineering Corp.	Box 10861, Pittsburgh 30	Pa
Nuclear Technology Corp	56 Church St, White Plains	NY
NUCLEAR UTILITY SERVICES, INC., Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
Orenda Engines Ltd.	Box 4016 Term A, Toronto	Can
Pickard-Warner-Lowe Assoc.	1025 Conn Ave, NW, Wash 6	DC
Quantum, Inc.	Lofberg Ave, Wallingford	Conn
Sargent & Lundy	140 S Dearborn St, Chicago 3	Ill
Schultz, M. A.	530 William Penn Pl, Pittsburgh 30	Pa
SOCIETE RATEAU, Adv Pg 112-T	Rue Rateau La Courneuve, Seine	Fr
TRG, Inc.	2 Aerial Way, Syosset	NY
United Engineers & Constructors, Inc.	1401 Arch St, Philadelphia 5	Pa
UNITED NUCLEAR CORP., Adv Pg 36	363 Winchester Ave. New Haven 4	Conn
Vitro Corp. of America	261 Madison Ave, New York 16	NY
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT. Adv. Pgs. 70, 71	Box 355, Pittsburgh 30	Pa

SERV. & CONS'LT: SAMPLING, AIR & WATER

Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Associates Nucleonics Inc.	975 Stewart Ave, Garden City	NY
Berwick Associates, Inc	130 E 53rd St, New York 22	NY
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
CONTROLS FOR RADIATION, INC. Adv Pg 189	130 Alewife Brook Pkwy Cambridge 40	Mass
Dumbiant & Assoc. Inc., R. M.	836 Lafayette St, New Orleans 13	La
EDGERTON, GERMESHAUSEN & GRIER, INC. Adv Pg 186	160 Brookline Ave, Boston 15	Mass
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
Homo Labs. Inc.	4264 Peach St, Lincoln 5	Neb
HAZLETON-NUCLEAR SCIENCE CORP. Adv Pg 38	4062 Fabian Way, Palo Alto	Cal
ISO/SERVE INC., Adv Pg 88	131 Portland St. Cambridge 39	Mass
ISOTOPES INC., Adv Pg 192	123 Woodland Ave. Westwood	NJ
Isotopes Specialties Co.	Box 608, Burbank	Cal
KAMAN AIRCRAFT CORP. TEXAS BIO-NUCLEAR DIV., Adv Pg 215	Box 9431, Austin 17	Tex
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lockheed Aircraft Corp. Georgia Div.	1500 Northside Dr. NW, Atlanta 18	Ga
M.A.A., Adv Pg 30	Box 752, Iowa College	Pa
National Spectrographic Lab. Inc.	6300 Euclid Ave. Cleveland 3	Ohio
Nuclear Consultants Corp.	1062 Manchester Rd. St. Louis 16	Mo
NUCLEAR ENGINEERING CO. INC., Adv Pg 119	65 Ray St. Box 218, Pleasanton	Cal
Nuclear Science & Engineering Corp.	Box 10861, Pittsburgh 30	Pa
NUCLEONIC CORP. OF AMERICA, Adv Pg 202	196 Degraw St. Brooklyn 31	NY
Quantum, Inc.	Lofberg Ave, Wallingford	Conn
Radiation Control Inc.	6043 S Euclid Ave, Chicago 17	Ill
RADIATION COUNTER LABS. INC. Adv. Pgs. 82, 83	5122 W Grove St. Skokie	Ill

Radiation Detection Co.	4047-49 Transport St, Palo Alto	Cal
RADIATION TECHNOLOGY, INC.		
Adv. Pg. 3rd Cover	687 Antone St. NW, Atlanta 18	Ga
Radiochemistry, Inc.	1111 W St. Catherine St, Louisville 10	Ky
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Schmidt Instrument Co.	Box 111, San Carlos	Cal
Transclab Reactor Monitoring Center	5000 Wright Ave, Richmond	Cal
Union Industrial Equipment Corp	Port Chester	NY
Vetz Radiochemical Co.	6800 Elmwood Ave, Skokie	Ill
Water Associates	45 Franklin St, Framingham	Mass

SERV. & CONS'LT: SHIELDING DESIGN

AEG, Adv Pg 113-A	Hoechstwe, Frankfurt/Main, Germany	
AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave, Greenwich	Conn
Ave Engineering & Machine Co, Inc.	Tredyffrin Rd, Huntingdon Valley	Pa
Admiral Corp.	3800 W Cortland St, Chicago 47	Ill
Advanced Technology Labs.	189 Whisman Rd, Mountain View	Cal
Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Aerojet Div Aerojet-General Corp	418 N Citrus Ave, Covina	Cal
Alco Product, Inc.	Box 1005, Schenectady 5	NY
ALLIED ENGINEERING & PRODUCTION CORP.		
Adv Pg 242	3421 Blanding Ave, Alameda	Cal
ALLIS-CHALMERS MFG. CO.		
Adv. Pgs. 109-111	933 S 70th St, Milwaukee 1	Wis
AMERICAN INSULTING & REFUSING CO.		
Adv Pg 67	130 Broadway, New York 5	NY
Americium Nucleonics Inc.	975 Stewart Ave, Garden City	NY
ASTRA, INC., Adv Pg 64	Box 236, Raleigh	NC
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV.,		
Adv. Pgs. 115, 231	Box 93, Ottawa, Ont	Can
Atomics International Div. NAA	Box 309, Canoga Park	Cal
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Babcock & Wilcox Ltd.	209 Euston Rd, London NW 1	Eng
BAR-RAY PRODUCTS, INC. Adv Pg 12	209 25th St. Brooklyn 32	NY
Becktel Corp.	220 Bush St. San Francisco 4	Cal
BELGONUCLEAIRE, Adv Pg 113-A	35 rue des Colonies, Brussels 1	Belg
Bolsa & Co. Inc., R. D.	615 Market St. San Francisco 5	Cal
Bonnard & Gardel	Ave de la Gare 10, Lausanne	Switz
Bour-Allen Applied Research, Inc.	1031 Washington Rd, Glenview	Ill
Burns & Roe, Inc.	160 W Broadway, New York 13	NY
Canadian General Electric Co Ltd.	197 Park St, Peterborough, Ont.	Can
Canadian Westinghouse Co. Ltd.	Box 510, Hamilton, Ontario, Canada	
Cerasum	17 Bd. de la Libération, St. Denis, Seine	Fr
Catalytic Construction Co.	1500 Walnut St. Philadelphia 2	Pa
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
Consolidated Western Steel Div. U. S.		
Steel Corp.	Box 3626, Terminal Annex, L.A 54	Cal
Cook Electric Co. Cook Tech Ctr.	4401 W Ouinn St, Morton Grove	Ill
COSMIC RADIATION LABS., INC.		
Adv Pg 3rd Cover	1440 Harrison Way, Bellport	NY
Dilworth, Secord, Meagher & Assoc Ltd	4054 Dundas St, W Toronto, Ont Canada	
Dunbliant & Assoc. Inc., R. M.	908 Lafayette St. New Orleans 12	La
Dynatech Corp.	889 Massachusetts Ave, Cambridge 39	Mass
Elsco Services Inc.	2 Rector St, New York 6	NY
EDGERTON, GERMESHAUSEN & GRIER, INC.		
Adv Pg 205	160 Brookline Ave, Boston 15	Mass
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
Ferguson Co., H. K.	2783 E 11th St. at Walnut, Cleveland 14	Ohio
Franklin Institute Labs.	Philadelphia 3	Pa
Gamma Industries, Inc.	Box 2343, Baton Rouge	La
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.		
Adv Pg 202	Box 608, San Diego 12	Cal
General Dynamics/Convair	Box 2678, San Diego 12	Cal
General Dynamics /Fort Worth	Box 748 Fort Worth 1	Tex
Hallett Mfg. Co.	9710 Brewerett St, Los Angeles 10	Cal
HAZLETON-NUCLEAR SCIENCE CORP.		
Adv Pg 28	4862 Polston Way, Palo Alto	Cal
Hitachi, Ltd	1-6-chome Marunouchi, Chiyoda-ku, Tokyo	Jap
Hochtemp. Brennst. Anwendungstechn GmbH.	Bensberg/Kaln, Paulinch	Ger
INTERNUCLEAR CO., Adv Pg 240	7 N Brentwood Blvd. Clayton 5	Mo
Irwin & Partners Ltd., E. G.	138 Southwark St. London SE1	Eng
KAISER ENGINEERS, Adv Pg 95	300 Lakeside Dr. Oakland 12	Cal
Knapp Mills Inc.	20-25 Borden Ave, LIC	NY
Lodge Boiler & Engineering Corp.	5801 S Walnut Ave, Chicago 6	Ill
Leybold Hochvakuum Anlagen	Bonner Str. 504, Koeln	Ger
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lockheed Aircraft Corp. Georgia Div.	1000 Northside Dr. NW, Atlanta 18	Ga
Main, Inc., Chas. T.	60 Federal St, Boston 10	Mass
Meister Lele Inc	191 Mill Lane, Mountainside	NJ
Marquardt Corp.	16555 Saticoy St, Van Nuys	Cal
Mann and McLellan	Milburn, Ebbw, Surrey, England	
METRIX, INC. Adv Pg 30	Box 2225, Deerfield	WI
New York Shipbuilding Corp.	Camden 1	NJ
Nuclear Consultants Corp.	9067 Manchester Rd, St. Louis 19	Mo
Nuclear Science & Engineering Corp.	Box 10901, Pittsburgh 36	Pa
NUCLEAR SHIELDING SUPPLIES & SERVICE INC.		
Adv Pg 198	139 Main St. White Plains	NY
Nuclear Technology Corp	86 Church St. White Plains	NY
Ohmart Corp.	5244 Regan St, Cincinnati 26	Ohio
Pantecnica Ltd.	56 Princess St, Hanover Sq, London W1, Eng	
PERMALI, INC. Adv Pg 197	Box 792, Mt. Pleasant	Pa
Radiation Control Inc.	5940 S Euclid Ave. Chicago 37	Ill
RADIATION TECHNOLOGY, INC.		
Adv. Pg. 3rd Cover	687 Antone St. NW, Atlanta 18	Ga
RAY-PROOF CORP. Adv Pg 200	843 Canal St. Stamford	Conn
Reliance Incorporated	2330-2332 Adams Ave, Phila 24	Pa
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Smith Corp., A. O., Atomic & Process Equip. Div.	5000 N 27 St, Milwaukee 1	Wis
Stanley Engineering Co.	Hershey Blvd, Muscatine	Iowa
Stearns Corp.	500 S Michigan Ave, Chicago 4	Ill
Stone & Webster Engineering Corp.	49 Federal St, Boston 7	Mass
Sumner Sollitt Co.	307 N Michigan Ave, Chicago 1	Ill
TRG, Inc.	2 Aerial Way, Syosset	NY
Tracerlab Industries Co.	36-16 37th St. LIC 1	NY
United Engineers & Constructors, Inc.	1401 Arch St. Philadelphia 5	Pa
UNITED NUCLEAR CORP., Adv Pg 36	368 Tomlinson Ave. New Haven 4	Conn
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.		
Adv. Pgs. 70, 71	Box 355, Pittsburgh 30	Pa

SERV. & CONS'LT: SIMULATORS, REACTOR & POWER PLANT- DESIGN

Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Aerox Div Aerojet-General Corp	418 N Citrus Ave, Covina	Cal
ASTRA, INC, Adv Pg 64	Box 236, Raleigh	NC
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Catalytic Construction Co.	1500 Walnut St. Philadelphia 2	Pa
Consolidated Western Steel Div. U. S. Steel Corp	Box 3626, Term. Annex, LA 54	Cal
Dynamic Inc. Control Systems Div.	4655 Mitchner Rd, La Jolla	Cal
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
Electronic Associates, Inc.	Long Branch	NJ
Franklin Institute Labs.	Philadelphia 3	Pa
HUGHES AIRCRAFT CO. NUCLEONICS LAB.		
Adv Pg 203	Box 2097, Fullerton	Cal
Jackson & Moreland, Inc	600 Park Square Bldg, Boston 16	Mass
KAISER ENGINEERS, Adv Pg 95	300 Lakeside Dr. Oakland 12	Cal
Kaijian Corp.	1500 N Broad St, Philadelphia 21	Pa
Leeds & Northrup Ltd.	Broad St, Birmingham 18	Eng
Meister Lele Inc	191 Mill Lane, Mountainside	NJ
MINN-HONEYWELL REG CO. IND. PRODS GROUP,		
Adv. Pgs. 126, 240	Wayne & Windsor Aves. Phila. 44	Pa
Philbrick Researches Inc., George A.	127 Clarendon St, Boston 16	Mass
RCA SERVICE CO. NUCLEAR & SCIENTIFIC SERVICES,		
Adv Pg 31	Cherry Hill, Delaware Tp. Camden 8	NJ
Schultz, M. A.	800 William Penn Pl, Pittsburgh 30	Pa
Tapco Div. Thompson Ramo Wooldridge Inc.	23666 Euclid Ave. Cleveland 17	Ohio
Teal, S.p.A., Pavia	Lugnano, Milan	Ital
Vickers Armstrong (S Marston) Ltd.	Swindon, Wiltshire	Eng

SERV. & CONS'LT: SITE LOCATION, NUCLEAR FACILITY

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
Advanced Technology Labs.	189 Whisman Rd. Mountain View	Cal
Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Aerox Div Aerojet-General Corp	418 N Citrus Ave, Covina	Cal
Alco Products, Inc.	Box 1005, Schenectady 5	NY
Associates Nucleonics Inc.	975 Stewart Ave, Garden City	NY
ASTRA, INC., Adv Pg 64	Box 236, Raleigh	NC
Atomics International Div. NAA	Box 309, Canoga Park	Cal
Becktel Corp.	220 Bush St. San Francisco 4	Cal
Bechtem & Whitley, Inc.	1016 E San Carlos Ave. San Carlos	Cal
BELGONUCLEAIRE, Adv Pg 113-A	35 rue des Colonies, Brussels 1	Belg
Bonnard & Gardel	Ave de la Gare 10, Lausanne	Switz
Bour-Allen Applied Research, Inc.	1031 Washington Rd. Glenview	Ill
Burns & Roe, Inc.	160 W Broadway, New York 13	NY
Catalytic Construction Co.	1500 Walnut St. Philadelphia 2	Pa
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
Dunbliant & Assoc. Inc., R. M.	908 Lafayette St. New Orleans 12	La
Elsco Service Inc.	2 Rector St, New York 6	NY
Erdmann & Partners Ltd.	11 Grosvenor Pl. London, SW 1, Eng	
Ferguson Co, H. K.	2783 E 11th St. at Walnut, Cleve 14	Ohio
Franklin Institute Labs.	Philadelphia 3	Pa
General Dynamics /Fort Worth	Box 748 Fort Worth 1	Tex
Gilbert Associates, Inc.	525 Lancaster Ave, Reading	Pa
HAZLETON-NUCLEAR SCIENCE CORP.		
Adv Pg 28	4862 Polston Way, Palo Alto	Cal
HUGHES AIRCRAFT CO. NUCLEONICS LAB.		
Adv Pg 203	Box 2097, Fullerton	Cal
INTERNUCLEAR CO., Adv Pg 240	7 N Brentwood Blvd. Clayton 5	Mo
ISO/SERVE INC., Adv Pg 68	131 Portland St. Cambridge 39	Mass
Jackson & Moreland, Inc	600 Park Square Bldg, Boston 16	Mass
KAISER ENGINEERS, Adv Pg 95	300 Lakeside Dr. Oakland 12	Cal
Kaijian Corp.	1500 N Broad St, Philadelphia 21	Pa
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lockheed Aircraft Corp. Georgia Div.	1000 Northside Dr. NW, Atlanta 18	Ga
Mc Lain Badger Associates	201 40th Pl, Downers Grove	Ill
Main, Inc., Chas. T.	60 Federal St, Boston 10	Mass
Meister Lele Inc	191 Mill Lane, Mountainside	NJ
Marquardt Corp.	16555 Saticoy St, Van Nuys	Cal
Massachusetts Commission on Atomic Energy	100 Cambridge St, Boston	Mass
Merz and McLellan	Milburn, Ebbw, Surrey, England	
Meteorology Research, Inc.	5400 N Lake Ave, Altadena	Cal
N.A.A., Adv Pg 30	Box 753, Texas College	Pa
Nuclear Science & Engineering Corp.	Box 10901, Pittsburgh 36	Pa
Nuclear Technology Corp	86 Church St. White Plains	NY
NUCLEAR UTILITY SERVICES, INC.,		
Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
Pickard Cullen Sperry Inc.	1086 Conn Ave, NW, Wash 6	Conn
Quantum, Inc	Lafferty Ave. Wallingford	Conn
Quinco Engineers, Ltd.	818 W 8th St, L A 17	Cal
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
Sargent & Lundy	140 S Dearborn St. Chicago 3	Ill
Stanley Engineering Co.	Hershey Blvd. Muscatine	Iowa
STEARNS-ROGER MFG. CO. Adv Pg 22	Box 5888, Denver 17	Colo
Stone & Webster Engineering Corp.	49 Federal St, Boston 7	Mass
Sumner Sollitt Co.	307 N Michigan Ave, Chicago 1	Ill
Tapco Div. Thompson Ramo Wooldridge Inc.	23666 Euclid Ave. Cleveland 17	Ohio
Tracerlab Reactor Monitoring Center	5000 Wright Ave. Richmond	Cal
United Engineers & Constructors, Inc.	1401 Arch St. Philadelphia 5	Pa
UNITED NUCLEAR CORP., Adv Pg 36	368 Tomlinson Ave. New Haven 4	Conn
Vitro Corp. of America	921 Madison Ave, New York 36	NY
Western Nuclear Corp.	Box 1185, Idaho Falls	Idah
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.		
Adv. Pgs. 70, 71	Box 355, Pittsburgh 30	Pa

SERV. & CONS'LT: SPACE TECHNOLOGY-NUCLEAR

AMF ATOMICS, Adv. Pgs. 76, 77, 99	140 Greenwich Ave. Greenwich	Conn
Admiral Corp.	3800 W Cortland St. Chicago 47	Ill
Advanced Technology Labs.	189 Whisman Rd. Mountain View	Cal
Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Allied Research Associates, Inc.	43 Leon St. Boston 15	Mass
ASTRA, INC., Adv Pg 64	Box 236, Raleigh	NC
Atomics International Div. NAA Inc.	Box 309, Canoga Park	Cal
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Bendix Corp. Research Labs. Div.	Southfield	Mich
Burns & Roe, Inc.	160 W Broadway, New York 13	NY
CONTROLS FOR RADIATION, INC.		
Adv Pg 189	129 Alewife Brook Pkwy. Cambridge 40	Mass
Denver Research Div. Denver Ind. Inc.	10700 Independence St. Tulsa	Okla
Dynatech Corp.	889 Massachusetts Ave, Cambridge 39	Mass
Elsco Services Inc.	2 Rector St. New York 6	NY
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
Franklin Institute Labs.	Philadelphia 3	Pa
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.		
Adv Pg 202	Box 608, San Diego 12	Cal
General Dynamics/Astronautics	Box 1128, San Diego 12	Cal
General Dynamics/Convair	Box 2678, San Diego 12	Cal
General Dynamics /Fort Worth	Box 748 Fort Worth 1	Tex
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Nuclear Engineering Corp.	Box 848, Dunedin	Fla
HARSHAW CHEMICAL CO. Adv Pg 89	1945 E 97th St. Cleveland 6	Ohio
HAZLETON-NUCLEAR SCIENCE CORP.		
Adv Pg 28	4862 Polston Way, Palo Alto	Cal
HIGH VOLTAGE ENGINEERING CORP.		
Adv Pg 179	5 Bedford St. Burlington	Mass
HUGHES AIRCRAFT CO. NUCLEONICS LAB.		
Adv Pg 203	Box 2097, Fullerton	Cal
Hull Associates	30 W Monroe St. Chicago 13	Ill
INTERNUCLEAR CO., Adv Pg 240	7 N Brentwood Blvd. Clayton 5	Mo
KAISER ENGINEERS, Adv Pg 95	300 Lakeside Dr. Oakland 12	Cal
KAMAN NUCLEAR, Adv. Pgs. 198, 199	Garden of the Gods Rd. Colo Springs	Colo
LIONEL ELECTRONIC LABS.		
Adv Pg 210	1226 Flushing Ave. Brooklyn 37	NY
Lockheed Aircraft Corp. Georgia Div.	1000 Northside Dr. NW, Atlanta 18	Ga
Meister Lele Inc.	191 Mill Lane, Mountainside	NJ
Marquardt Corp	16555 Saticoy St. Van Nuys	Cal
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.		
Adv Pg 2	Box 896, Attleboro	Mass
N.A.A., Adv Pg 30	Box 753, Texas College	Pa
Neutron Products, Inc	1007 Thos. Jefferson St NW, Wash 7	DC
Northern Research & Eng. Corp.	238 Main St. Cambridge	Mass
Nuclear Science & Engineering Corp.	Box 10901, Pittsburgh 36	Pa
Nuclear Technology Corp	86 Church St. White Plains	NY
NUCLEAR UTILITY SERVICES, INC.,		
Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
Pickard-Warner-Lowe Assoc.	1455 Conn. Ave. NW, Washington 6	DC
Planning Research Corp.	1650 Wilshire Blvd, LA 24	Cal
Quantedyne	Box 368, Westland Hills	Cal
RCA SERVICE CO. NUCLEAR & SCIENTIFIC SERVICES,		
Adv Pg 31	Cherry Hill, Delaware Tp. Camden 8	NJ
RADIATION TECHNOLOGY, INC.		
Adv. Pg. 3rd Cover	687 Antone St. NW, Atlanta 18	Ga
Rosenberg Associates, Paul	100 Stevens Ave, Mt. Vernon	NY
ROYAL RESEARCH CORP. Adv Pg 29	11024 Dublin Blvd. Hayward	Cal
TRG, Inc	2 Aerial Way, Syosset	NY
Tapco Div. Thompson Ramo Wooldridge Inc.	23666 Euclid Ave. Cleveland 17	Ohio
TECHNICAL MEASUREMENT CORP.		
Adv Pg 43	461 Washington Ave. North Haven	Conn
Technology Instrument Corp	551 Main St, Acton	Mass
TRACERLAB, INC. Adv. Pgs. 134, 113-A	1640 Tropelo Rd. Waltham 54	Mass
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.		
Adv. Pgs. 70, 71	Box 355, Pittsburgh 30	Pa

SERV. & CONS'LT: SPECTROGRAPHIC ANALYSIS

Aerojet-General Nucleonics	Box 77, San Ramon	Cal
Alco Products, Inc.	Box 1005, Schenectady 5	NY
Allen Underwood, Inc.	25-01 42nd Ave, LIC 1	NY
American Cast Iron Pipe Co.	Box 2030, Birmingham 2	Ala
Avalay Electric, Ltd.	2 Orchardson, Essex	Eng
Bechtem & Whitley Inc.	1016 E San Carlos Ave. San Carlos	Cal
Bour-Allen Applied Research, Inc.	1031 Washington Rd. Glenview	Ill
Combustion Engineering, Inc.	200 Madison Ave. New York 16	NY
Franklin Institute Labs.	Philadelphia 3	Pa
Fulmer Research Institute	Stoke Poges, Bucks	Eng
General Dynamics/Convair	Box 2678, San Diego 12	Cal
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
Jarrell-Ash Co.	36 Farwell St. Newtonville 60	Mass
Jem Precision Mfg. Corp	6 Huron Dr. Natick	Mass
Leiscor & Co.	300 Allied Ave. Teaneck	NJ

Lockheed Aircraft Corp. ... Bo. 561, Burbank ... Cal
Lockheed Aircraft Corp. Georgia Div. ... 1560 Northside Dr. NW, Atlanta 18 ... Ga
M.S.L.E. ... 80 Rue des Deux Gares, Brussels 7 ... Belg
Magnaflux Corp. ... 7300 W Lawrence, Chicago 31 ... Ill
Minister Labs Inc ... 101 Mill Lane, Mountainside ... NJ
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.
Adv Pg 2 ... Box 896, Attleboro ... Mass
National Spectrographic Lab. Inc. ... 6300 Euclid Ave. Cleveland 3 ... Ohio
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),
Adv. Pgs. 217, 219, 221 ... 1080 Varco St. Apollo ... Pa
Nuclear Metals, Inc. ... Box 333 Concord ... Mass
Nukem, GmbH ... Wolfgang am, Hanau/Main ... Ger
Ontario Research Foundation ... 43 Queen's Pk. Toronto 5, Ontario ... Can
RADIATION COUNTER LABS. INC.
Adv. Pgs. 82, 83 ... 5122 W Grove St. Skokie ... Ill
Stone Testing Lab. Inc. ... 227 Knowlton St. Bridgeport 6 ... Conn
Sulzer Bros. Ltd. ... Winterthur ... Switz
Transitab Reactor Monitoring Center ... 2020 Wright Ave. Richmond ... Cal
UNITED NUCLEAR CORP., Adv Pg 26 ... 365 Westchester Ave. New Haven 4 ... Conn
York Research Corp. ... 1 Research Dr. Stamford ... Conn

SERV. & CONS'LT: STRESS ANALYSIS

Aerojet-General Nucleonics ... Box 77, San Ramon ... Cal
Alco Products, Inc. ... Box 1065, Schenectady 5 ... NY
Allied Research Associates, Inc. ... 43 Leon St. Boston 15 ... Mass
ASTRA, INC., Adv Pg 64 ... Box 226, Raleigh ... NC
Avsley Electric, Ltd. ... 5 Orlando, Essex ... Eng
Babcock & Wilcox Ltd. ... 209 Euston Rd. London NW 1 ... Eng
Bemis & Reinecke, Inc. ... 120 E Ohio St. Chicago 11 ... Ill
Bechman & Whitley Inc. ... 898 E San Carlos Ave. San Carlos ... Cal
Brass & Co., C. F. ... Alhambra ... Cal
Cook Electric Co. Cook Tech Ctr. ... 6601 W Oakton St. Morton Grove ... Ill
Dynatrek Corp. ... 600 Massachusetts Ave. Cambridge 39 ... Mass
Elmco Services Inc. ... 3 Hector St. New York 6 ... NY
Electric Boat Div. Gen. Dynamics Corp. ... Industrial Services Dept. 600, Groton ... Conn
FOSTER WHEELER CORP. Adv Pg 128 ... 666 5th Ave. New York 19 ... NY
Franklin Institute Labs. ... Philadelphia 3 ... Pa
General Dynamics/Astronautics ... Box 1128, San Diego 12 ... Cal
General Dynamics/Convair ... Box 1950, San Diego 12 ... Cal
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ... 1 River Rd. Schenectady 5 ... NY
INTERNUCLEAR CO., Adv Pg 240 ... 7 N Brentwood Blvd. Clayton 5 ... Mo
KAISER ENGINEERS, Adv Pg 85 ... 300 Lakeside Dr. Oakland 12 ... Cal
Lockheed Aircraft Corp. Georgia Div. ... 1560 Northside Dr. NW, Atlanta 18 ... Ga
Minister Labs Inc. ... 101 Mill Lane, Mountainside ... NJ
Marquardt Corp. ... 16555 Saticoy St. Van Nuys ... Cal
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),
Adv. Pgs. 217, 219, 221 ... 1080 Varco St. Apollo ... Pa
Nuclear Technology Corp. ... 66 Church St. White Plains ... NY
Ontario Research Foundation ... 43 Queen's Pk. Toronto 5, Ontario ... Can
Orenda Engines Ltd. ... Box 4015 Term A, Toronto ... Can
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 187 ... Eindhoven ... Neth
Pittsburgh Piping & Equipment Co. ... 158 40th St. Pittsburgh ... Pa
Sulzer Bros. Ltd. ... Winterthur ... Switz
Transcontinental Corp. ... 8185 Aero Dr. San Diego 11 ... Cal
United Engineers & Constructors, Inc. ... 1401 Arch St. Philadelphia 5 ... Pa

SERV. & CONS'LT: TECHNICAL WRITING

Acoustics Associates Inc. ... 10400 Aviation Blvd. Los Angeles 45 ... Cal
Aircraft & Missile Consultants ... 2725 Anthony Ave. Manhattan Beach ... Cal
Alco Products, Inc. ... Box 1065, Schenectady 5 ... NY
Alloys Research & Mfg. Corp. ... 36-32 37th St. Woodside 77 ... NY
Allstates Design & Devel. Co. Inc. ... 25 N Warren St. Trenton ... NJ
Associates Nucleonics Inc. ... 975 Stewart Ave. Garden City ... NY
Atlantic Research Corp. ... Alexandria ... Va
Atomaterial-Burmine Corp. ... 111 W Jewel Ave. St. Louis 23 ... Mo
Bemis & Reinecke, Inc. ... 120 E Ohio St. Chicago 11 ... Ill
Babcock Instrument Corp. ... 113-03 14th Ave. College Point 56 ... NY
Bruce Allen Applied Research, Inc. ... 1021 Washington Rd. Glenview ... Ill
Bowen & Associates, Inc. ... 130 E 53rd St. New York 22 ... NY
Burns & Roe, Inc. ... 100 W Broadway, New York 13 ... NY
Catalytic Construction Co. ... 1528 Walnut St. Philadelphia 2 ... Pa
Elmco Services Inc. ... 3 Hector St. New York 6 ... NY
Electric Boat Div. Gen. Dynamics Corp. ... Industrial Services Dept. 600, Groton ... Conn
Electro Physics Co. ... 307-1 Broadway, New York 7 ... NY
Flight Refueling Inc. ... Box 1701, Baltimore 3 ... Md
General Dynamics/Astronautics ... Box 1128, San Diego 12 ... Cal
General Dynamics/Convair ... Box 1950, San Diego 12 ... Cal
Gilbert Associates, Inc. ... 525 Lancaster Ave. Reading ... Pa
HAZLETON-NUCLEAR SCIENCE CORP.
Adv Pg 38 ... 4962 Fabian Way, Palo Alto ... Cal
Harris Foundation ... 120 W 57th St. New York 19 ... NY
Jackson & Moreland, Inc ... 600 Park Square Bldg. Boston 16 ... Mass
LAMBDA INC. DIV. SYLVALUMINA INC.
Adv Pg 204 ... 7460 W Wilson Ave. Chicago 31 ... Ill
Ledoux & Co. ... 359 Alfred Ave. Teaneck ... NJ
Librascope Div. Gen. Precision, Inc. ... Glendale 1 ... Cal
Lockheed Aircraft Corp ... Box 551, Burbank ... Cal
Lockheed Aircraft Corp. Georgia Div. ... 1560 Northside Dr. NW, Atlanta 18 ... Ga
Minister Labs Inc ... 101 Mill Lane, Mountainside ... NJ
Nemic Research Laboratory ... 1027 Bay Rd. East Palo Alto ... Cal
Nuclear Technology Corp ... 66 Church St. White Plains ... NY
Orenda Engines Ltd. ... Box 4015 Term A, Toronto ... Can
Pearson Jr., Harold T. ... 301 Fenlie Bldg. Princeton ... NJ
Planar Ltd., G. V. ... Winchcill Rd. Banbury-on-Thames, Midds ... Eng

NUCLEAR SERVICE CO. NUCLEAR & SCIENTIFIC SERVICES,
Adv Pg 31 ... Cherry Hill, Delaware Twp. Camden 9 ... NJ
Thermo Div. Thompson Ramo Wooldridge Inc. ... 23555 Euclid Ave. Cleveland 17 ... Ohio
Transitab Reactor Monitoring Center ... 2020 Wright Ave. Richmond ... Cal
Universal Match Corp. Armament Div. ... 475 Pear Ave. St. Louis 33 ... Mo
Western Nuclear Corp. ... Box 1166, Idaho Falls ... Idaho
York Research Corp. ... 1 Research Dr. Stamford ... Conn

SERV. & CONS'LT: TESTING, ENVIRONMENTAL

AMF ATOMICS, Adv. Pgs. 76, 77, 79 ... 140 Greenwich Ave. Greenwich ... Conn
Acoustics Associates Inc. ... 10400 Aviation Blvd. Los Angeles 45 ... Cal
Admiral Corp. ... 3800 W Cortland St. Chicago 47 ... Ill
Aerojet Div Aerojet-General Corp ... 410 N Citrus Ave. Covina ... Cal
Aircraft Equipment Testing Co. Inc. ... 2111-19 Eastern Ave. Baltimore 21 ... Md
Alco Products, Inc. ... Box 1065, Schenectady 5 ... NY
Allied Research Associates, Inc. ... 43 Leon St. Boston 15 ... Mass
Allison Div. Gen. Motors Corp. ... Box 894, Indianapolis ... Ind
American Air Filter Co. ... 215 Central Ave. Louisville 8 ... Ky
American Beach Arms Corp. ... 200 Fulton Ave. Hempstead ... NY
American Electronics Inc. ... 1684 E Ross Ave. Fullerton ... Cal
Armstrong Whitworth Equipment ... Hazlewood, Gloucester ... Eng
Associated Testing Labs. Inc. ... 134 Rte. 46, Wayne ... NJ
BABCOCK & WILCOX CO.
Adv. Pgs. 34, 35 ... 161 E 42 St. New York 17 ... NY
Baird Corporation Div. Baird Res. Labs. ... 49-53 Edison Pl. Newark 2 ... NJ
Barry Controls Div. Barry Wright Corp. ... 700 Pleasant St. Watertown 72 ... Mass
Belock Instrument Corp. ... 113-03 14th Ave. College Point 56 ... NY
Bethlehem Corp ... 205 W 2nd St. Bethlehem ... Pa
Bowrich Associates, Inc ... 130 E 53rd St. New York 22 ... NY
Burns & Roe, Inc. ... 100 W Broadway, New York 13 ... NY
Cannon ... Box 5884, Jacksonville 7 ... Fla
California Tech. Ind. Div. Tenmo Inc ... 1421 Old County Rd. Belmont ... Cal
Canadian Westinghouse Co. Ltd. ... Box 510, Hamilton, Ontario, Canada
CHANDLER EVANS CORP. Adv Pg 120 ... Charter Oak Blvd. West Hartford ... Conn
Chicago Bridge & Iron Co. ... 332 S Michigan Ave. Chicago 4 ... Ill
Combustion Engineering, Inc. ... 200 Madison Ave. New York 16 ... NY
Cook Electric Co. Cook Tech Ctr. ... 6601 W Oakton St. Morton Grove ... Ill
Designers for Industry, Inc. ... 4041 Fulton Pkwy. Cleveland 9 ... Ohio
Dunham & Assoc. Inc., R. M. ... 626 Lafayette St. New Orleans 12 ... La
EDGERTON, GERMESHAUSEN & GRIER, INC.
Adv Pg 165 ... 160 Brookline Ave. Boston 15 ... Mass
Electric Boat Div. Gen. Dynamics Corp. ... Industrial Services Dept. 600, Groton ... Conn
Flight Refueling Inc. ... Box 1701, Baltimore 3 ... Md
Fulmer Research Institute ... Stoke Poges, Bucks ... Eng
Garrett Corp. ... 9851 Sepulveda Blvd. Los Angeles 45 ... Cal
General Applied Science Labs. Inc. ... Merrick & Stewart Ave. Westbury ... NY
General Dynamics/Astronautics ... Box 1128, San Diego 12 ... Cal
General Dynamics/Convair ... Box 1950, San Diego 12 ... Cal
General Dynamics /Fort Worth ... Box 748 Fort Worth 1 ... Tex
General Dynamics /Pomona ... Box 1011, Pomona ... Cal
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ... 1 River Rd. Schenectady 5 ... NY
Harris Labs. Inc. ... 654 Peach St. Lincoln 8 ... Neb
HARVEY ALUMINUM, Adv Pg 39 ... 19200 S Western Ave. Torrance ... Cal
HAZLETON-NUCLEAR SCIENCE CORP.
Adv Pg 38 ... 4962 Fabian Way, Palo Alto ... Cal
HIGH VOLTAGE ENGINEERING CORP.
Adv Pg 179 ... 5 Bedford St. Burlington ... Mass
ISO/SERVE INC., Adv Pg 88 ... 131 Portland St. Cambridge 39 ... Mass
ISOTOPES INC., Adv Pg 192 ... 123 Woodland Ave. Westwood ... NJ
Isotopes Specialties Co. ... Box 608, Burbank ... Cal
Jom Pneumatic Mfg. Corp ... 6 Huron Dr. Natick ... Mass
Leach Corp. ... 10456 Sonora Rd. Compton ... Cal
Librascope Div. Gen. Precision, Inc. ... Glendale 1 ... Cal
Lockheed Aircraft Corp ... Box 551, Burbank ... Cal
Lockheed Aircraft Corp. Georgia Div. ... 1560 Northside Dr. NW, Atlanta 18 ... Ga
Minister Labs Inc. ... 101 Mill Lane, Mountainside ... NJ
Marquardt Corp. ... 16555 Saticoy St. Van Nuys ... Cal
National Research Corp. ... 70 Memorial Dr. Cambridge 42 ... Mass
Orenda Engines Ltd. ... Box 4015 Term A, Toronto ... Can
Philco Corp. Gov. & Ind. Gr. ... 4700 Wissahickon Ave. Phila 44 ... Pa
Planar Ltd., G.V. ... Winchcill Rd. Banbury-on-Thames, Midds. ... Eng
Research Inc. ... Box 6104, Edina Sta. Minpls 24 ... Minn
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229 ... 25 Rd G. Clemenceau, Courbevoie, Seine ... Fr
Thermo Div. Thompson Ramo Wooldridge Inc. ... 23555 Euclid Ave. Cleveland 17 ... Ohio
Technology Instrument Corp ... 651 Main St. Acton ... Mass
Tele-Dynamics Div Amer. Bosch Arma Corp ... 2000 Parkside Ave. Phila 31 ... Pa
Transitab Reactor Monitoring Center ... 2020 Wright Ave. Richmond ... Cal
UNITED NUCLEAR CORP., Adv Pg 26 ... 365 Westchester Ave. New Haven 4 ... Conn
U. S. NUCLEAR CORP., Adv Pg 127 ... 3011 N Lake St. Box 2002, Burbank ... Cal
Vacuum Apparatus Co ... Box 1091, Palo Alto ... Cal
WESTINGHOUSE TESTING REACTOR,
Adv. Pgs. 195 & 70, 71 ... Box 1075, Pittsburgh 30 ... Pa
York Research Corp. ... 1 Research Dr. Stamford ... Conn

SERV. & CONS'LT: TESTING, NONDESTRUCTIVE

See Also INSPECTION EQUIPMENT
RADIOGRAPHIC EQUIPMENT

Aerojet Div Aerojet-General Corp ... 410 N Citrus Ave. Covina ... Cal
Aircraft Equipment Testing Co. Inc. ... 2111-19 Eastern Ave. Baltimore 21 ... Md
Alco Products, Inc. ... Box 1065, Schenectady 5 ... NY
Allied Research Associates, Inc. ... 43 Leon St. Boston 15 ... Mass
Alloys Research & Mfg. Corp. ... 36-32 37th St. Woodside 77 ... NY
American Cast Iron Pipe Co. ... Box 2030, Birmingham 2 ... Ala
Associated Testing Labs. Inc. ... 134 Rte. 46, Wayne ... NJ
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV.,
Adv. Pgs. 115, 231 ... Box 93, Ottawa, Ont ... Can
Avsley Electric, Ltd. ... 5 Orlando, Essex ... Eng
BTR Industries Ltd. ... Vincent Sq. London, SW1 ... Eng
BABCOCK & WILCOX CO.
Adv. Pgs. 34, 35 ... 161 E 42 St. New York 17 ... NY
Babcock & Wilcox Ltd. ... 209 Euston Rd. London NW 1, England
Barkley & Dexter Labs. Inc. ... 66 Franklin St. Fitchburg ... Mass
Bonney-Floyd Co. ... 811 Marion Rd. Columbus 7 ... Ohio
BRANSON INSTRUMENTS, INC. Adv Pg 79 ... 37 Brown House Rd. Stamford ... Conn
California Tech. Ind. Div. Tenmo Inc. ... 1421 Old County Rd. Belmont ... Cal
Chesapeake Instrument Corp. ... Shadyside ... Md
Combustion Engineering, Inc. ... 200 Madison Ave. New York 16 ... NY
Cook Electric Co. Cook Tech Ctr. ... 6601 W Oakton St. Morton Grove ... Ill
Curtiss-Wright Corp. Princeton Div. ... Box 110, Princeton ... NJ
Designers for Industry, Inc. ... 4041 Fulton Pkwy. Cleveland 9 ... Ohio
DRESSER PRODUCTS, INC. Adv Pg 200 ... Great Barrington ... Mass
Dresser Research Div. Dresser Ind. Inc. ... 10700 Independence St. Tulsa ... Okla
Elmco Services Inc. ... 3 Hector St. New York 6 ... NY
Electric Boat Div. Gen. Dynamics Corp. ... Industrial Services Dept. 600, Groton ... Conn
Falk & Co. Ltd., M. ... Estates House, Brigstow, Gosney ... Eng
Flight Refueling Inc. ... Box 1701, Baltimore 3 ... Md
Fulmer Research Institute ... Stoke Poges, Bucks ... Eng
Gamma Industries ... 28 Rue de Dunkerque, Paris 9, France
General Applied Science Labs. Inc. ... Merrick & Stewart Ave. Westbury ... NY
General Dynamics/Astronautics ... Box 1128, San Diego 12 ... Cal
General Dynamics/Convair ... Box 1950, San Diego 12 ... Cal
General Dynamics /Fort Worth ... Box 748 Fort Worth 1 ... Tex
General Dynamics /Pomona ... Box 1011, Pomona ... Cal
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ... 1 River Rd. Schenectady 5 ... NY
Gower Tank & Mfg. Co. Div. Union Tank Car Co. ... 35 E Wacker Dr. Chicago 1 ... Ill
Hacker & Co. Inc., William J. ... Box 646, West Caldwell ... NJ
HAZLETON-NUCLEAR SCIENCE CORP.
Adv Pg 38 ... 4962 Fabian Way, Palo Alto ... Cal
HIGH VOLTAGE ENGINEERING CORP.
Adv Pg 179 ... 5 Bedford St. Burlington ... Mass
Hull Associates ... 20 W Monroe St. Chicago 3 ... Ill
Industrial X-Ray & Research, Inc. ... 600 Second St. Muskegon ... Mich
ISO/SERVE INC., Adv Pg 88 ... 131 Portland St. Cambridge 39 ... Mass
ISOTOPES INC., Adv Pg 192 ... 123 Woodland Ave. Westwood ... NJ
Jom Pneumatic Mfg. Corp ... 6 Huron Dr. Natick ... Mass
Kahl Scientific Instrument Corp. ... Box 1186, El Cajon ... Cal
KAMAN AIRCRAFT CORP. TEXAS RED-NUCLEAR DIV.,
Adv Pg 215 ... Box 9401, Austin 17 ... Tex
Knapp Mills Inc. ... 20-15 Borden Ave. LIC ... NY
Ledoux & Co. ... 359 Alfred Ave. Teaneck ... NJ
Librascope Div. Gen. Precision, Inc. ... Glendale 1 ... Cal
Lockheed Aircraft Corp ... Box 551, Burbank ... Cal
Lockheed Aircraft Corp. Georgia Div. ... 1560 Northside Dr. NW, Atlanta 18 ... Ga
Lufkin Corp., Peter F. ... First Natl. Bank Bldg. Pittsburgh 22 ... Pa
Magnaflux Corp. ... 7300 W Lawrence, Chicago 31 ... Ill
Maritime Chemical & Repair Corp. ... 420 Hamilton Ave. Brooklyn 32 ... NY
Marquardt Corp. ... 16555 Saticoy St. Van Nuys ... Cal
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.
Adv Pg 2 ... Box 896, Attleboro ... Mass
Motherwell Bridge & Engg. Co. Ltd. ... Box 4, Motherwell, Scotland
Mutual Boiler & Machy Insurance Co. ... 225 Wyman St. Waltham 54 ... Mass
Nuclear Metals, Inc. ... Box 333 Concord ... Mass
Ontario Research Foundation ... 43 Queen's Pk. Toronto 5, Ontario ... Can
Orenda Engines Ltd. ... Box 4015 Term A, Toronto ... Can
Pneumatics Ltd. ... 54 Princes St. Hanover Sq. London W1, Eng
PHOENIX-RHEINROHR AG, Adv Pg 27 ... August-Thyssen-Str 1, Duesseldorf ... Ger
Pittsburgh Piping & Equipment Co. ... 158 40th St. Pittsburgh ... Pa
Planar Ltd., G.V. ... Winchcill Rd. Banbury-on-Thames, Midds. ... Eng
Powertron Ultrasonics Corp. ... Depew, Ind. Pk. Plainview ... NY
Rosenberg Associates, Paul ... 100 Sussex Ave. Mt. Vernon ... NY
Rosemin Controls Ltd. ... 640 Dorsonville St. Montreal, Que. Can.
S. A. I. P. ... 28 Rue Gabriel Crie, Malakoff, Seine ... Fr
S.E.R.A.L., Adv Pg 113-J ... 1991 chaussee d'Alsemberg, Beersels 18 ... Belg
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229 ... 25 Rd G. Clemenceau, Courbevoie, Seine ... Fr
St. John X-Ray Laboratory ... Caldon ... NJ
Sulzer-Brown Inc. ... Box 5225, Pittsburgh 30 ... Pa
Silverstone Rubber Co., Ltd. ... Vincent Sq. London SW1 ... Eng
Smith Corp., A. O., Aerojet & Frame Equip. Div. ... 3533 N 27 St. Milwaukee 1 ... Wis
Sulzer-Schoell, Ltd. ... Henrypet Ln. Southgate, Middx ... Eng
Sperry Products Co. ... Shelter Rock Rd. Danbury ... Conn
Stone Testing Lab. Inc. ... 227 Knowlton St. Bridgeport 6 ... Conn
Sulzer Bros. Ltd. ... Winterthur ... Switz
SYLCOR DIV. SYLVANIA ELEC PRODS. INC.
Adv Pg 24 ... Cantiague Rock Rd. Hicksville ... NY
Technology Instrument Corp. ... 651 Main St. Acton ... Mass
Texas Nuclear Corp. ... Box 9267, Allandale Sta. Austin 17 ... Tex
Transitab Reactor Monitoring Center ... 2020 Wright Ave. Richmond ... Cal
UNITED NUCLEAR CORP., Adv Pg 26 ... 365 Westchester Ave. New Haven 4 ... Conn
WESTINGHOUSE ELEC. CORP. ATOMIC FUEL DEPT.
Adv. Pgs. 171 & 70, 71 ... Cheswick ... Pa
Wheeler Mfg. Co., C. H. ... 1800 Indiglen Ave. Philadelphia 29 ... Pa
York Research Corp. ... 1 Research Dr. Stamford ... Conn

SERV. & CONS'LT: TESTING, POSTIRRADIATION

Admiral Corp. ... 3800 W Cortland St. Chicago 47 ... Ill
Aerojet-General Nucleonics ... Box 77, San Ramon ... Cal
California Tech. Ind. Div. Tenmo Inc. ... 1421 Old County Rd. Belmont ... Cal
Cook Electric Co. Cook Tech Ctr. ... 6601 W Oakton St. Morton Grove ... Ill
Electric Boat Div. Gen. Dynamics Corp. ... Industrial Services Dept. 600, Groton ... Conn

GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.
Adv Pg 202 ..... Box 608, San Diego 12 ..... Cal
General Dynamics /Fort Worth ..... Box 748 Fort Worth 1 ..... Tex
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ..... 1 River Rd. Schenectady 5 ..... NY
HAZLETON-NUCLEAR SCIENCE CORP.
Adv Pg 50 ..... 4862 Fabian Way, Palo Alto ..... Cal
ISO/SERVE INC., Adv Pg 80 ..... 131 Portland St. Cambridge 39 ..... Mass
ISOTOPES INC., Adv Pg 192 ..... 132 Woodland Ave. Westwood ..... NJ
KAMAN AIRCRAFT CORP. TEXAS BIO-NUCLEAR DIV.,
Adv Pg 215 ..... Box 9431, Austin 17 ..... Tex
Lockheed Aircraft Corp. ..... Box 551, Burbank ..... Cal
Lockheed Aircraft Corp. Georgia Div. ..... 1500 Northside Dr. NW, Atlanta 18 ..... Ga
Marquardt Corp. ..... 16555 Saticoy St. Van Nuys ..... Cal
NUCLEAR UTILITY SERVICES, INC.,
Adv Pg 7 ..... 1025 Connecticut Ave. N W, Wash 6 ..... DC
S.E.R.A.L., Adv Pg 113-J ..... 1091 chaussee d'Alsemberg, Brussels 18 ..... Belg
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229 ..... 23 Bd G. Clemenceau, Courbevoie, Seine ..... Fr
Transfab Reactor Monitoring Center ..... 2020 Wright Ave. Richmond ..... Cal
UNITED NUCLEAR CORP., Adv Pg 36 ..... 365 Westmoreland Ave. New Haven 4 ..... Conn
U. S. NUCLEAR CORP., Adv Pg 127 ..... 801 N Lake St. Box 2022, Burbank ..... Cal
WESTINGHOUSE TESTING REACTOR,
Adv. Pgs. 198 & 70, 71 ..... Box 1089, Pittsburgh 30 ..... Pa
York Research Corp. ..... 1 Research Dr. Stamford ..... Conn

SERV. & CONS'LT: THERMONUCLEAR TECHNOLOGY

Aerojet-General Nucleonics ..... Box 77, San Ramon ..... Cal
Allied Research Associates, Inc. ..... 43 Leon St. Boston 15 ..... Mass
ALLIS-CHALMERS MFG. CO.,
Adv. Pgs. 109-111 ..... 455 S 70th St. Milwaukee ..... Wis
ASTRA, INC., Adv Pg 64 ..... Box 238, Raleigh ..... NC
CONTROLS FOR RADIATION, INC.
Adv Pg 189 ..... 130 Alewife Brook Pkwy. Cambridge 40 ..... Mass
Elcom Systems Inc. ..... 2 Rector St. New York 6 ..... NY
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.
Adv Pg 202 ..... Box 608, San Diego 12 ..... Cal
General Dynamics/Convair ..... Box 5878, San Diego 12 ..... Cal
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ..... 1 River Rd. Schenectady 5 ..... NY
KAMAN NUCLEAR, Adv. Pgs. 190, 191 ..... Garden of the Gods Rd. Colo Springs ..... Colo
Nuclear Science & Engineering Corp. ..... Box 10001, Pittsburgh 36 ..... Pa
NUCLEAR UTILITY SERVICES, INC.,
Adv Pg 7 ..... 1025 Connecticut Ave. N W, Wash 6 ..... DC
Optomedyne ..... Box 353, Woodland Hills ..... Cal
RCA SERVICE CO. NUCLEAR & SCIENTIFIC SERVICES,
Adv Pg 31 ..... Cherry Hill, Delaware Tp. Camden 8 ..... NJ
UNITED NUCLEAR CORP., Adv Pg 36 ..... 365 Westmoreland Ave. New Haven 4 ..... Conn
WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.
Adv. Pgs. 70, 71 ..... Box 355, Pittsburgh 30 ..... Pa

SERV. & CONS'LT: THORIUM CONVERSION

FORMS PRODUCED:
1. METAL INGOTS
2. METAL PLATES
3. METAL RODS
4. OXIDE PELLETS
5. OXIDE POWDER
6. ALLOYS

AMERICAN POTASH & CHEM. CORP. 5,
Adv Pg 184 ..... 3000 W 6th St. Los Angeles 54 ..... Cal
BABCOCK & WILCOX CO. 4-5,
Adv. Pgs. 34, 35 ..... 161 E 42 St. New York 17 ..... NY
Carborundum Co. B & D Div, 6 ..... New Prods. Dr. NRG, Niagara Falls ..... NY
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. 4,6
Adv Pg 202 ..... Box 608, San Diego 12 ..... Cal
Grace & Co, W. R., Davison Chemical Div,
1-2-3-4-5-6 ..... Erwin ..... Tenn
HEEMANITE METAL CORP. 1-2,
Adv Pg 63 ..... 714 North Ave. New Rochelle ..... NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. 1-3-5-6,
Adv Pg 3 ..... Box 936, Attleboro ..... Mass
National Beryllia Corp. 4 ..... 1st & Haskell Aves. Haskell ..... NJ
NATIONAL LEAD CO. 1-2-3,
Adv. Pgs. 80, 81 ..... 111 Broadway, New York 6 ..... NY
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), 4-5-6,
Adv. Pgs. 217, 219, 221 ..... 1000 Vernon St. Apollo ..... Pa
Nuclear Metals, Inc. 3-6 ..... Box 1028 Concord ..... Mass
Nukem, GmbH, 1-2-3-4-5-6 ..... Wolfgang am, Hanau/Main ..... Ger
Sacandaga Ceramics, Inc. 4 ..... Box 187, Sacandaga ..... Pa
Saint-Gobain Inc, 1-2-3-6 ..... 30 W Montgomery Pkwy, Mt. Vernon ..... NY
SHOWA DENKO K. K., 1-2-3-4-5-6,
Adv Pg 112-G ..... 34 Hatchi Hyomoto-cho, Minato-ku, Tokyo ..... Jap
State Testing Lab. Inc, 3 ..... 227 Knowlton St, Bridgeport 5 ..... Conn
SYLCOR DIV. SYLVANIA ELEC PRODS. INC. 1-2-3-6,
Adv Pg 20 ..... Castleton Rock Rd. Hicksville ..... NY
TOKYO SHIBAURA ELECTRIC CO. LTD. 1-2-3-4, Adv Pg 225 ..... 12 Yanaka-cho 1-Chome, Chiyoda-ku, Tokyo ..... Jap
UNITED NUCLEAR CORP. 4, Adv Pg 36 ..... 365 Westmoreland Ave. New Haven 4 ..... Conn
VAN-LAC-DID CHEMICAL CO. 5,
Adv Pg 241 ..... 116 Broad St. New York 4 ..... NY
WESTINGHOUSE ELEC. CORP. ATOMIC FUEL DEPT. 4,
Adv. Pgs. 121 & 70, 71 ..... Cheswick ..... Pa
ZIRCONIUM CORP. OF AMERICA, 5,
Adv Pg 226 ..... 31206-0 Solon Rd. Solon 39 ..... Ohio

SERV. & CONS'LT: TRAFFIC & TRANSPORTATION

Boor-Allen Applied Research, Inc. ..... 1501 Waukegan Rd. Glenview Ill
Burns & Roe, Inc. ..... 160 W Broadway, New York 13 ..... NY
Electric Boat Div. Gen. Dynamics Corp. ..... Industrial Services Dept. 600, Groton ..... Conn
Franklin Institute Labs. ..... Philadelphia 3 ..... Pa
General American Transportation Corp. ..... 135 S LaSalle St. Chicago 3 Ill
Grace & Co., W. R. Davison Chemical Div. ..... Erwin ..... Tenn
Knapp Mills Inc. ..... 32-16 Borden Ave. LIC ..... NY
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),
Adv. Pgs. 217, 219, 221 ..... 1000 Vernon St. Apollo ..... Pa
Pickard-Warner-Love Assoc. ..... 1025 Conn Ave. NW, Wash 6 ..... DC
Planning Research Corp. ..... 1333 Westwood Blvd. LA 24 ..... Cal
Stanray Corp. ..... 200 S Michigan Ave. Chicago 4 Ill

SERV. & CONS'LT: TRAINING, NUCLEAR

AMF ATOMICS, Adv. Pgs. 76, 77, 99 ..... 140 Greenwich Ave. Greenwich ..... Conn
Aerojet-General Nucleonics ..... Box 77, San Ramon ..... Cal
Atomasters-Sustaine Corp. ..... 111 W Jewel Ave. St. Louis 22 ..... Mo
Atomics International Div. NAA ..... Box 309, Canoga Park ..... Cal
Bestwick Associates, Inc ..... 130 E 53rd St, New York 22 ..... NY
Burns & Roe, Inc. ..... 160 W Broadway, New York 13 ..... NY
CNEI Atomics ..... 2224 18th St. NW, Washington 10 ..... DC
Elsaco Services Inc. ..... 2 Rector St. New York 6 ..... NY
Electric Boat Div. Gen. Dynamics Corp. ..... Industrial Services Dept. 600, Groton ..... Conn
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.
Adv Pg 202 ..... Box 608, San Diego 12 ..... Cal
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ..... 1 River Rd. Schenectady 5 ..... NY
HAZLETON-NUCLEAR SCIENCE CORP.
Adv Pg 50 ..... 4862 Fabian Way, Palo Alto ..... Cal
INTERNUCLEAR CO., Adv Pg 240 ..... 7 N Brentwood Blvd. Clayton 5 ..... Mo
Leybold Hochvakuum Anlagen ..... Bonner Str. 504, Koeln ..... Ger
Lockheed Aircraft Corp. ..... Box 551, Burbank ..... Cal
Malmster Labs Inc. ..... 181 Mill Lane, Montclairside ..... NJ
Nuclear Consultants Corp. ..... 9042 Manchester Rd. St. Louis 18 ..... Mo
Nuclear Decontamination Corp ..... 115 Warren St. Apollo ..... Pa
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),
Adv. Pgs. 217, 219, 221 ..... 1000 Vernon St. Apollo ..... Pa
Nuclear Technology Corp ..... 55 Church St. White Plains ..... NY
Nuclear Science & Engineering Corp. ..... Box 10001, Pittsburgh 36 ..... Pa
NUCLEAR UTILITY SERVICES, INC.,
Adv Pg 7 ..... 1025 Connecticut Ave. N W, Wash 6 ..... DC
Pickard-Warner-Love Assoc. ..... 1025 Conn Ave, NW, Wash 6 ..... DC
RCA SERVICE CO. NUCLEAR & SCIENTIFIC SERVICES,
Adv Pg 31 ..... Cherry Hill, Delaware Tp. Camden 8 ..... NJ
RADIATION EQUIP. & ACCESSORIES CORP.
Adv. Pg. 3rd Cover ..... 665 Merrick Rd. Lynbrook ..... NY
REACTOR EXPERIMENTS, INC.
Adv Pg 26 ..... 145 Vernon Blvd. Redwood ..... Cal
TRACERLAB, INC. Adv. Pgs. 124, 113-5 ..... 1601 Trapelo Rd. Waltham 54 ..... Mass
Transfab Reactor Monitoring Center ..... 2020 Wright Ave. Richmond ..... Cal
U. S. NUCLEAR CORP., Adv Pg 127 ..... 801 N Lake St. Box 2022, Burbank ..... Cal

SERV. & CONS'LT: URANIUM CONVERSION

FORMS PRODUCED:
1. METAL INGOTS
2. METAL PLATES
3. METAL RODS
4. OXIDE PELLETS
5. OXIDE POWDER
6. ALLOYS

American Metal Products Co. 6-5 ..... 6559 Lindale Ave. Detroit 6 ..... Mich
BABCOCK & WILCOX CO. 1-2-4-5-6,
Adv. Pgs. 34, 35 ..... 161 E 42 St. New York 17 ..... NY
Canadian General Electric Co Ltd., 4 ..... 197 Park St. Peterborough, Ont. ..... Can
Carborundum Co. B & D Div, 5-6 ..... New Prods. Dr. NRG, Niagara Falls ..... NY
Eldorado Mining & Refining Ltd., 5-6 ..... John St. Port Hope, Ont ..... Can
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. 1-2-3-4-5-6,
Adv Pg 202 ..... Box 608, San Diego 12 ..... Cal
Grace & Co, W. R., Davison Chemical Div,
1-2-3-4-5-6 ..... Erwin ..... Tenn
Kuhlmann, Etc, 5 ..... 25 bd de l'Amiral-Bruix, Paris 16e ..... Fr
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. 1-3-5-6,
Adv Pg 3 ..... Box 936, Attleboro ..... Mass
NATIONAL LEAD CO. 1-2-3-4-5-6,
Adv. Pgs. 80, 81 ..... 111 Broadway, New York 6 ..... NY
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), 4-5-6,
Adv. Pgs. 217, 219, 221 ..... 1000 Vernon St. Apollo ..... Pa
Nuclear Metals, Inc, 3-6 ..... Box 1028 Concord ..... Mass
Nukem, GmbH, 1-2-3-4-5-6 ..... Wolfgang bei Hanau/Main, Germany
RIO TINTO MINING CO. OF CANADA LTD. 1-2-3-4-5-6,
Adv Pg 122 ..... 225 Bay St. Toronto, Ont. ..... Can
SAINT-GOBAIN NUCLEAIRE, 1-2-3-4-5-6,
Adv Pg 229 ..... 23 Bd G. Clemenceau, Courbevoie, Seine ..... Fr
SYLCOR DIV. SYLVANIA ELEC PRODS. INC. 1-2-6,
Adv Pg 20 ..... Castleton Rock Rd. Hicksville ..... NY
Torrance Brass Foundry, Inc. 3 ..... 1815 W 213th St. Torrance ..... Cal
UNITED NUCLEAR CORP. 1-4-5-6,
Adv Pg 36 ..... 365 Westmoreland Ave. New Haven 4 ..... Conn
VAN-LAC-DID CHEMICAL CO. 5,
Adv Pg 241 ..... 116 Broad St. New York 4 ..... NY
WESTINGHOUSE ELEC. CORP. ATOMIC FUEL DEPT. 1-2-3-4-6,
Adv. Pgs. 121 & 70, 71 ..... Cheswick ..... Pa

SERV. & CONS'LT: URINALYSIS

ATOMIC RESEARCH LAB. DIV. ATOMIC CORP. OF AMERICA,
Adv Pg 104 ..... 14725 Arminta St. Panorama City ..... Cal
Bio-Science Labs. ..... 12330 Santa Monica Blvd. L A 25 ..... Cal
Bestwick Associates, Inc ..... 130 E 53rd St, New York 22 ..... NY
Combustion Engineering, Inc. ..... 200 Madison Ave. New York 16 ..... NY
CONTROLS FOR RADIATION, INC.
Adv Pg 189 ..... 130 Alewife Brook Pkwy Cambridge 40 ..... Mass
Electric Boat Div. Gen. Dynamics Corp. ..... Industrial Services Dept. 600, Groton ..... Conn
Harris Labs. Inc. ..... 604 Peach St. Lincoln 2 ..... Neb
HAZLETON-NUCLEAR SCIENCE CORP.
Adv Pg 50 ..... 4862 Fabian Way, Palo Alto ..... Cal
ISO/SERVE INC., Adv Pg 80 ..... 131 Portland St. Cambridge 39 ..... Mass
ISOTOPES INC., Adv Pg 192 ..... 132 Woodland Ave. Westwood ..... NJ
KAMAN AIRCRAFT CORP. TEXAS BIO-NUCLEAR DIV.,
Adv Pg 215 ..... Box 9431, Austin 17 ..... Tex
Nuclear Consultants Corp. ..... 9042 Manchester Rd. St. Louis 19 ..... Mo
Nuclear Metals, Inc. ..... Box 1028 Concord ..... Mass
Nuclear Science & Engineering Corp. ..... Box 10001, Pittsburgh 36 ..... Pa
Radiation Detection Co. ..... 4047-49 Transport St. Palo Alto ..... Cal
Transfab Reactor Monitoring Center ..... 2020 Wright Ave. Richmond ..... Cal
U. S. NUCLEAR CORP., Adv Pg 127 ..... 801 N Lake St. Box 2022, Burbank ..... Cal
Volk Radiochemical Co. ..... 6060 Simonsen Ave. Chicago Ill

SERV. & CONS'LT: VACUUM ANNEALING

Combustion Engineering, Inc. ..... 200 Madison Ave. New York 16 ..... NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.
Adv Pg 3 ..... Box 936, Attleboro ..... Mass
Sintercast Div. Chemalloy Div. ..... 189 Warren Hwy. West Nyack ..... NY
SYLCOR DIV. SYLVANIA ELEC PRODS. INC.
Adv Pg 20 ..... Castleton Rock Rd. Hicksville ..... NY
WESTINGHOUSE ELEC. CORP. ATOMIC FUEL DEPT.
Adv. Pgs. 121 & 70, 71 ..... Cheswick ..... Pa

SERV. & CONS'LT: VENTILATION-SYSTEM DESIGN

Aerun Div Aerojet-General Corp ..... 410 N Citrus Ave, Covina ..... Cal
American Air Filter Co. ..... 215 Central Ave, Louisville 8 ..... Ky
Associates Nucleonics Inc. ..... 975 Stewart Ave, Garden City ..... NY
Atomics International Div. NAA Inc. ..... Box 309, Canoga Park ..... Cal
Boor-Allen Applied Research, Inc. ..... 1031 Washington Rd. Glenview Ill
Burns & Roe, Inc. ..... 160 W Broadway, New York 13 ..... NY
CAMBRIDGE FILTER CORP. Adv Pg 137 ..... 730 Erie Blvd. E, Box 1255, Syracuse 1 ..... NY
Catalytic Construction Co. ..... 1520 Walnut St. Philadelphia 2 ..... Pa
Chiyoda Chemical Eng. & Const. Co Ltd ..... 1-10, Shiba-Shinbashi, Minato-Ku, Tokyo, Japan
Dilworth, Secord, Meagher & Assoc Ltd ..... 4214 Dundas St. W Toronto, Ont Canada
Dollo & Associates, John ..... 300 E La Salle St. Chicago 4 Ill
Dombhart & Assoc. Inc., B. M. ..... 930 Lafayette St. New Orleans 12 ..... La
Electric Boat Div. Gen. Dynamics Corp. ..... Industrial Services Dept. 600, Groton ..... Conn
Howard & Partners Ltd. ..... 11 Grosvenor Pl. London, SW 1, Eng
Gilbert Associates, Inc. ..... 525 Lancaster Ave. Reading ..... Pa
HAZLETON-NUCLEAR SCIENCE CORP.
Adv Pg 50 ..... 4862 Fabian Way, Palo Alto ..... Cal
ISO/SERVE INC., Adv Pg 80 ..... 131 Portland St. Cambridge 39 ..... Mass
Metz, Inc., Chas. T. ..... 80 Federal St. Boston 10 ..... Mass
Marquardt Corp. ..... 16555 Saticoy St. Van Nuys ..... Cal
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),
Adv. Pgs. 217, 219, 221 ..... 1000 Vernon St. Apollo ..... Pa
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229 ..... 23 Bd G. Clemenceau, Courbevoie, Seine ..... Fr
Sargent & Lundy ..... 140 S Dearborn St. Chicago 3 Ill
SOCIETE RATEAU, Adv Pg 113-T ..... Rue Rateau La Courneuve, Seine ..... Fr
Sulzer Bros. Ltd. ..... Winterthur ..... Switz

SERV. & CONS'LT: WASTE DISPOSAL, RADIOACTIVE

AMF ATOMICS, Adv. Pgs. 76, 77, 99 ..... 140 Greenwich Ave. Greenwich ..... Conn
Aerun Div Aerojet-General Corp ..... 410 N Citrus Ave, Covina ..... Cal
Atomics International Div. NAA Inc. ..... Box 309, Canoga Park ..... Cal
Belge de Chimie Nucleaire, Sta. ..... 36 rue des Colonies, Brussels ..... Belg
Bio-Rad Laboratories ..... 1237 S 32nd St. Richmond ..... Cal
Boor-Allen Applied Research, Inc. ..... 1031 Washington Rd. Glenview Ill
Bestwick Associates, Inc ..... 130 E 53rd St, New York 22 ..... NY
Burns & Roe, Inc. ..... 160 W Broadway, New York 13 ..... NY
Carbonisation Entreprise & Cosmique ..... 8 Pl. des Etats-Unis, BP80, Montrouge, Seine ..... Fr
Catalytic Construction Co. ..... 1520 Walnut St. Philadelphia 2 ..... Pa
Chiyoda Chemical Eng. & Const. Co Ltd ..... 1-10, Shiba-Shinbashi, Minato-Ku, Tokyo, Japan
CHEMALLOY NUCLEAR WASTE DISPOSAL CORP.
Adv Pg 191 ..... 111 Belvedere St. Boston 15 ..... Mass
Dilworth, Secord, Meagher & Assoc Ltd ..... 4214 Dundas St. W Toronto, Ont Canada
Dombhart & Assoc. Inc., B. M. ..... 930 Lafayette St. New Orleans 12 ..... La
Electric Boat Div. Gen. Dynamics Corp. ..... Industrial Services Dept. 600, Groton ..... Conn
Flight Refueling Inc. ..... Box 1901, Baltimore 3 ..... Md
Fraser & Co. Ltd., W. S. ..... Harold Hill, Romford, Essex, England
Gilbert Associates, Inc. ..... 525 Lancaster Ave. Reading ..... Pa
Grace & Co., W. R. Davison Chemical Div. ..... Erwin ..... Tenn
Isotopes Specialties Co. ..... Box 808, Burbank ..... Cal
Knapp Mills, Inc. ..... 32-16 Borden Ave. LIC 1 ..... NY
Leybold Hochvakuum Anlagen ..... Bonner Str. 504, Koeln ..... Ger
Lockheed Aircraft Corp. ..... Box 551, Burbank ..... Cal
Lockheed Aircraft Corp. Georgia Div. ..... 1500 Northside Dr. NW, Atlanta 18 ..... Ga
N.A.A., Adv Pg 50 ..... Box 752, Iowa College ..... Pa
Nuclear Consultants Corp. ..... 9042 Manchester Rd. St. Louis 18 ..... Mo
NUCLEAR ENGINEERING CO. INC.,
Adv Pg 119 ..... 65 Bay St. Box 218, Piedmonte ..... Cal
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),
Adv. Pgs. 217, 219, 221 ..... 1000 Vernon St. Apollo ..... Pa
Nuclear Metals, Inc. ..... Box 1028 Concord ..... Mass

NUCLEAR UTILITY SERVICES, INC.		
Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
OAK RIDGE NATL LAB, INTERPES SALES DEPT.		
Adv Pg 236	Box X, Oak Ridge	Tenn
Ocean Transport Co.	1 Drumm St, San Francisco	Cal
Olsen Filtration Engineers Div. Assoc. Ldry.	Machy. Co.	
	6804 Section Ave, Cinc 12	Ohio
Pickard-Warner-Lowe Assoc.	1055 Conn Ave, NW, Wash 6	DC
Quantum, Inc.	Lafferty Ave, Wallingford	Conn
Quinton Engineers, Ltd.	832 W 8th St, L A 17	Cal
Radiation Applications, Inc.	35-40 37th St, Long Island City 1	NY
RADIOLOGICAL SERVICE CO. INC.		
Adv Pg 116	811 W Merrick Rd, Valley Stream	NY
Reliance Incorporated	1210-1212 Adams Ave, Phila 24	Pa
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Rd G. Clemenceau, Courbevoie, Seine	Fr
Tracerlab Reactor Monitoring Center	3050 Wright Ave, Richmond	Cal
U. S. NUCLEAR CORP., Adv Pg 127	801 N Lake St. Box 2022, Redwood	Cal
Universal Match Corp, Armament Div.	475 Paul Ave, St. Louis 26	Mo
Vennes pour le Traitement des Eaux, S A	1 Quai des Vennes, Liege	Belg

SERV. & CONS'LT: WASTE TREATMENT, RADIOACTIVE

ABP ATOMICS, Adv. Pgs. 76, 77, 79	140 Greenwich Ave, Greenwich	Conn
Aerojet Div Aerojet-General Corp	410 N Citrus Ave, Covina	Cal
Alco Products, Inc.	Box 1005, Schenectady 5	NY
Aqua-Chem, Inc.	505 N Grand Ave, Waukesha	Wis
Atomics International Div. NAA Inc.	Box 309, Canoga Park	Cal
Belge de Chimie Nucleaire, Sa.	36 rue des Colonies, Brussels	Belg
Bio-Rad Laboratories	1217 S 32nd St, Richmond	Cal
Burns & Roe, Inc.	160 W Broadway, New York 13	NY
Carbonisation Europeire & Cosmique	6 Pl. du Etats-Unis, BP85, Montrouge, Seine	Fr
Catalytic Construction Co.	1500 Walnut St, Philadelphia 2	Pa
Chem-Pure Service Co.	703 Industrial Rd, San Carlos	Cal
Croll-Reynolds Engineering Co.	1132 Main St, Stamford	Conn
Dilworth, Secord, Meagher & Assoc. Ltd.	4516 Dundas St. W, Toronto, Ont.	Can
Doubleist & Assoc. Inc., B. M.	826 Lafayette St, New Orleans 13	La
Dorr-Oliver Inc.	77 Havemeyer Ln, Stamford	Conn
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept, 000, Groton	Conn
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
Frame & Co. Ltd., W. J.	Harold Hill, Romford, Essex, England	
Gilbert Associates, Inc.	525 Lancaster Ave, Reading	Pa
HAZLETON-NUCLEAR SCIENCE CORP.		
Adv Pg 58	4802 Fabian Way, Palo Alto	Cal
Leybold Hochvakuum Anlagen	Bonner Str. 504, Koln	Ger
Lockheed Aircraft Corp, Georgia Div.	1000 Northside Dr. NW, Atlanta 18	Ga
H.A.A., Adv Pg 59	Box 752, Iowa College	Pa
Nucleon Products, Inc	1007 Tuck, Jefferson St NW, Wash 7	DC
NUCLEAR ENGINEERING CO. INC.,		
Adv Pg 119	65 Bay St. Box 318, Pleasanton	Cal
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC)		
Adv. Pgs. 217, 219, 221	1000 Warren St. Apollo	Pa
NUCLEAR UTILITY SERVICES, INC.,		
Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
Olsen Filtration Engineers Div. Assoc. Ldry.	Machy. Co.	
	6804 Section Ave, Cinc 10	Ohio
Pickard-Warner-Lowe Assoc.	1055 Conn Ave, NW, Wash 6	DC
Quinton Engineers, Ltd.	832 W 8th St, L A 17	Cal
Radiation Applications, Inc.	35-40 37th St, Long Island City 1	NY
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Rd G. Clemenceau, Courbevoie, Seine	Fr
Tracerlab Reactor Monitoring Center	3050 Wright Ave, Richmond	Cal
U. S. NUCLEAR CORP., Adv Pg 127	801 N Lake St. Box 2022, Redwood	Cal
Universal Match Corp, Armament Div.	475 Paul Ave, St. Louis 26	Mo
Vennes pour le Traitement des Eaux, S A	1 Quai des Vennes, Liege	Belg
WESTINGHOUSE TESTING REACTOR.		
Adv. Pgs. 195 & 78, 71	Box 1073, Pittsburgh 30	Pa

SERV. & CONS'LT: WATER CONDITIONING

Aerojet Div Aerojet-General Corp	410 N Citrus Ave, Covina	Cal
Bio-Rad Laboratories	1217 S 32nd St, Richmond	Cal
Burns & Roe, Inc.	160 W Broadway, New York 13	NY
Chem-Pure Service Co.	703 Industrial Rd, San Carlos	Cal
Croll-Reynolds Engineering Co.	1132 Main St, Stamford	Conn
Doubleist & Assoc. Inc., B. M.	826 Lafayette St, New Orleans 13	La
Dorr-Oliver Inc.	77 Havemeyer Ln, Stamford	Conn
ELSIN SOFTENER CORP. Adv Pg 116	179 N Gore Ave, Elgin	Ill
General American Transportation Corp.	135 S LaSalle St, Chicago 3	Ill
Gilbert Associates, Inc.	525 Lancaster Ave, Reading	Pa
Graver Water Conditioning Co.	216 W 14 St, New York 11	NY
HALLAM CHEMICALS & CONTROLS, INC.		
Adv Pg 29	Box 1348, Pittsburgh 30	Pa
Nalco Chemical Co.	6216 W 66th Pl, Chicago 38	Ill
Permutit Co. Div. Pfaudler Permutit Inc.	50 W 44th St, New York 36	NY
Quinton Engineers, Ltd.	832 W 8th St, L A 17	Cal
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Rd G. Clemenceau, Courbevoie, Seine	Fr
Salem-Brosius Inc.	Box 2225, Pittsburgh 30	Pa
U. S. NUCLEAR CORP., Adv Pg 127	801 N Lake St. Box 2022, Redwood	Cal
Vennes pour le Traitement des Eaux, S A	1 Quai des Vennes, Liege	Belg

SERV. & CONS'LT: WELDING, NUCLEAR

All-State Welding Alloys Co. Inc.	Box 166, White Plains	NY
American Welding & Mfg. Co.	100 Unity St. Warren	Ohio
AVERY & SAUL CO., Adv Pg 73	110 Hudge Ave. Cambridge	Mass
BABCOCK & WILCOX CO.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Bigelow Co.	Box 795, New Haven 3	Conn
Bussey-Floyd Co.	611 Mullins St. Columbus 7	Ohio
Burns & Roe, Inc.	160 W Broadway, New York 13	NY
CPC ENGINEERING CORP. Adv Pg 236	Box 26, Stoneridge	Mass
Canadian Westinghouse Co. Ltd.	Box 510, Hamilton, Ontario, Canada	
Cayuga Machine & Fabricating Co. Inc.	200 W Gould Ave. Depew	NY
Bravo Corp	Dravo Bldg. Pittsburgh 22	Pa
DRESSER PRODUCTS, INC. Adv Pg 208	Great Barrington	Mass
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 000, Groton	Conn
FOSTER WHEELER CORP. Adv Pg 130	165 5th Ave. New York 19	NY
General Dynamics (Fort Worth)	Box 748 Fort Worth 1	Tex
L & S Machine Co. Inc.	Box 317, R. D. 5, Lansdale	Pa
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.		
Adv Pg 3	Box 992, Attleboro	Mass
New York Shipbuilding Corp.	Camden 1	NJ
PHOENIX-ANLAGEN AG, Adv Pg 27	August-Thyssen-Str 1, Duesseldorf	Ger
Pickard-Warner-Lowe Assoc.	1055 Conn Ave, NW, Wash 6	DC
Pittsburgh Piping & Equipment Co.	154 40th St, Pittsburgh	Pa
ROYAL RESEARCH CORP. Adv Pg 27	11604 Dublin Blvd. Hayward	Cal
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Rd G. Clemenceau, Courbevoie, Seine	Fr
Salem-Brosius Inc.	Box 2225, Pittsburgh 30	Pa
Schutz Bros. Inc.	4916 W 67th St. Chicago 38	Ill
Smith Corp., A. O., Aussie & Process Equip. Div.	3533 N 27 St. Milwaukee 1	Wis
UNITED NUCLEAR CORP., Adv Pg 24	563 Winchester Ave. New Haven 4	Conn
VARD, Adv Pg 125	2901 E Colorado, Pasadena	Cal
WESTINGHOUSE ELEC. CORP. ATOMIC FUEL DEPT.		
Adv. Pgs. 125 & 78, 71	Cheswick	Pa
WESTINGHOUSE ELEC CORP. STEAM DIV.		
Adv. Pgs. 70, 71	Lester	Pa

SERV. & CONS'LT: WELL-LOGGING

HARSHAW CHEMICAL CO. Adv Pg 89	1945 E 97th St. Cleveland 6	Ohio
N.A.A., Adv Pg 59	Box 752, Iowa College	Pa
Sommers & Mills, Inc.	611 Levee St. Dallas 7	Tex
Uranium Instruments Co.	Box 1130, Grand Junction	Colo

SERVOMECHANISMS
See Also MOTORS--SERVO

A.E.I. Ltd.	33 Grosvenor Pl. London SW1, Eng	
Aerojet Div Aerojet-General Corp	410 N Citrus Ave, Covina	Cal
Belock Instrument Corp.	129-08 14th Ave. College Point 56	NY
Beckle Corp. Eclipse Pioneer Div.	Teterboro	NJ
Beckle Corp. Research Lab. Div.	Southfield	Mich
Bethlehem Steel Corp.	701 E 3rd St. Bethlehem	Pa
Bowe Allen Applied Research, Inc.	1001 Washington Bd. Glenview	Ill
Bowmar Instrument Corp.	8000 Bluffton Bd. Fort Wayne	Ind
Bristol Co.	Box 1790 HBG, Waterbury 20	Conn
CHANDLER EVANS CORP. Adv Pg 139	Charter Oak Blvd. West Hartford	Conn
Clifton Precision Products Co. Inc.	1882 State Rd. Doylestown	Pa
Computer Systems Inc.	Culver Rd. Monmouth Junction	NJ
Consolidated Controls Corp.	14 Dunnet Ave, Bethel	Conn
DEL ELECTRONICS CORP. Adv Pg 35	521 Hempstead Ave. St. Venon	NY
Eastern Air Devices, Inc. Div. Herbert Corp.		
	306 Central Ave. Dover	NH
Electronics Mon Ste d'	11 rue Petit, Clichy Seine	Fr
Electronique & Automatisme, ste d'	Courbevoie Seine	Fr
Frenkel & Vignoles, Ltd. Aetna Lane Wks.	Chiswick, London W4	Eng
EX-CELLO CORP. ATOMICS DIV.		
Adv. Pgs. 8, 9	1200 Gulman Blvd. Detroit 32	Mich
Feedback, Ltd.	1 The Broadway, Crowborough, Sussex	Eng
Flight Refueling Inc.	Box 1701, Baltimore 3	Md
GENERAL ELECTRIC CO. APPARATUS SALES.		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
Hamilton Standard Div. United Aircraft Corp.	East. 5, Broad Brook	Conn
Harvey Electronics Ltd.	573 Farnborough Rd. Farnborough, Hants	Eng
Honeywell Controls, Ltd.	100 River Rd. Clifton	Conn
Hull Associates	Vanderbilt Ave. Toronto, Ont Canada	
Jordan Controls Inc.	30 W Monroe St, Chicago 3	Ill
KAMAN NUCLEAR, Adv. Pgs. 190, 191	2336 W Hampton Ave, Milwaukee 8	Wis
KEARFOTT DIV. GEN. PRECISION, INC.		
Adv Pg 237	1150 McBride Ave. Little Falls	NJ
LAMB-AIR INC. SUB. DYNALECTRON INC.		
Adv Pg 204	7444 W Wilson Ave. Chicago 31	Ill
Londs & Northrup Ltd.	Broad St, Birmingham 16	Eng
Librascope Div. Gen Precision, Inc.	Glendale 1	Cal
Link Div. - Gen. Precision, Inc.	Binghamton	NY
Litton Industries	336 N Foothill Rd. Beverly Hills	Cal
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
M. Ten Bosch, Inc.	80 Wheeler Ave, Pleasantville	NY
Marquardt Corp.	16555 Saticoy St, Van Nuys	Cal
Miles Electronics Ltd.	Shawbury Aept. Shrewsbury, Sussex, Eng	
Monsanto Inc. Sub. Model Eng. & Mfg. Co.	4675 S State St. Salt Lake City	Utah
Muirhead Instruments Inc.	441 Lexington Ave, New York 17	NY
New York Air Brake Co.	230 Park Ave, New York 17	NY
Packard Aircraft Co	5827 W Century Blvd, Los Angeles 45	Cal
Precision Mechanisms Corp	44 Brooklyn Ave. Westbury	NY
Pye, Ltd	St. Andrews Rd, Cambridge	Eng
Reeves Instrument Corp.	5 Gone Blvd. Garden City	NY
Rose Reactor Corp.	160 New Mill River Rd. Yonkers	NY
RUCKER CO., THE, Adv Pg 189	4700 San Pablo Ave. Oakland 8	Cal
Special Instruments Lab, Inc.	313 W Vine Ave, Knoxville 01	Tenn
Spectrol Electronics Corp.	1704 S Del Mar Ave, San Gabriel	Cal
Sulzer Bros. Ltd.	Winterthur	Switz
Taylor Dis. Thompson Ramo Wooldridge Inc.	23666 Euclid Ave. Cleveland 17	Ohio
Telecomputing Corp.	8126 Aero Dr. San Diego 11	Cal
Thompson, Ltd., John	Wolverhampton	Eng
THOMSON-HOUSTON (CIE. FRANCAISE).		
Adv Pg 113-0	173 Blvd. Haussmann, Paris 8	Fr
United Control Systems, Inc.	918 Woodley Rd. Dayton 3	Ohio
Universal Match Corp, Armament Div.	475 Paul Ave, St. Louis 26	Mo
Vactric Control Equipment Ltd.	30 Riverside St, London E C 4	Eng

SHAFTS--FLEXIBLE

Kaphian Mfg. Div. Atkinson Tool, Prod. Inc.	560 State St. Binghamton	NY
Millen Mfg. Co., James	150 Exchange St. Malden	Mass
Morris, Ltd., B. O.	Acton Rd, Coventry	Eng
STEWART CORP. F. V. Adv Pg 207	4311 N Ravenswood Ave. Chicago 13	Ill
STOW MFG. CO. Adv Pg 217	355 Shaw St. Binghamton	NY

SHELLS--STATOR

CPC ENGINEERING CORP. Adv Pg 236	Box 26, Stoneridge	Mass
MIDWEST PIPING DIV. CRANE CO.		
Adv Pg 102	1439 S Second St. St. Louis 4	Mo
National Forge Co	Irvine, Warren City	Pa
SAMUELY FOUNDRY & MACHINE CO.		
Adv Pg 33	W Market St. Sandusky	Ohio
Sulzer Bros. Ltd.	Winterthur	Switz

SHIELDING--RADIATION
See Also METALS, ALLOYS & COMPOUNDS
SERVICES: SHIELDING DESIGN

1. BONDED LEAD-STEEL
2. BORATED PLASTICS
3. CASKS, SPENT-FUEL SHIPPING AND STORAGE
4. CONCRETE AGGREGATES
5. DEPLETED URANIUM
6. HIGH-DENSITY CONCRETE
7. HIGH-DENSITY GLASS
8. LEAD BRICKS
9. LEAD CASTINGS
10. PLASTIC
11. SHIELDED CONTAINERS
12. SHIELDED DOORS
13. WINDOWS
14. HIGH-DENSITY METAL

Alco Products, Inc. 8	Box 1005, Schenectady 5	NY
ALLIED ENGINEERING & PRODUCTION CORP. 1-3-4-8-9-10-11-12-13,		
Adv Pg 242	2620 Blending Ave. Alameda	Cal
Allied Lead Construction Co. 1-2-3-4-5-7-8-9-10-11-12-13-14	6038 S Chicago Ave. Chicago	Ill
Allied Plastics Supply Corp. 10-12	75 Cliff St. New York 38	NY
Allied Radiation Products, Inc. 3-8-13	Whitney Rd. & Clark St. Conneaut	Ohio
Alloys research & Mfg. Corp. 1	34-38 37th St. Woodside 77	NY
Allego Industrial, Inc. 9	41-01 43rd Ave. LIC 1	NY
Alpha Metals, Inc. 8	808 Water St, Jersey City 4	NJ
AMERAY CORP. 1-3-4-6-7-8-9-11-12-13,		
Adv Pg 113	Route 46, Rowel	NJ
AMERICAN NUCLEAR CORP. 9-11,		
Adv Pg 190	Box 438, Oak Ridge	Tenn
AMERICAN SMELTING & REFINING CO. 1-2-6-8-11-12-14,		
Adv Pg 67	120 Broadway, New York 5	NY
Atlas & Morrill, Inc. 10	Port Rd. South Hadley	Mass
Armoured-Bernstein Corp. 9-11	111 W Jewel Ave, St. Louis 22	Mo
ATOMIC ACCESSORIES, INC. 3-6-11,		
Adv Pg 206	811 W Merrick Rd. Valley Stream	NY
Atomic Devel. & Machine Corp. 11	15-04 130 St. College Point 56	NY
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV. 9-11,		
Adv. Pgs. 112, 231	Box 93, Ottawa, Ont	Can
Atomium Corp. 12	940 Main St, Waltham	Mass
AVERY & SAUL CO. 11, Adv Pg 73	110 Hudge Ave. Cambridge	Mass
BABCOCK & WILCOX CO. 3-11-12,		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Babcock & Wilcox Ltd. 3-12	209 Euston Rd. London NW 1	Eng
Baldwin-Lima-Hamilton Corp. 11	Dept. N 8, Philadelphia 42	Pa
BAR-RAY PRODUCTS, INC. 1-3-4-6-7-8-9-10-11-12-13-14,		
Adv Pg 12	200 25th St. Brooklyn 32	NY
BELGONUCLEAIRE, S, Adv Pg 113-4	35 rue des Colonies, Brussels 1	Belg
Belmont Smelting & Refining Works, Inc. 8-9	330 Belmont Ave, Brooklyn 7	NY
Bethlehem Steel Corp. 1-12	701 E 3rd St. Bethlehem	Pa
Bolton & Co. Inc., A. D. 6	616 Market St. San Francisco 5	Cal
Borwick Associates, Inc. 8-11	130 E 33rd St, New York 22	NY
BRIDGES & PERKINS, 3-12, Adv Pg 114	1520 W Fort St. Detroit 16	Mich
CAMBRIDGE SMELTING CO. 8-9,		
Adv Pg 230	190 Pacific St. Cambridge	Mass
Canadian Westinghouse Co. Ltd. 8	Box 510, Hamilton, Ontario	Can
Conn Sales Corp. 14	300 Park Ave. New York 22	NY
Chance-Pilkington Optical Works, 7-12	St. Asaph, Flintshire, GB	
Combustion Engineering, Inc. 9-11	200 Madison Ave. New York 16	NY
Consumer Rubber & Plastic Co. Div.		
U. S. Stoneware Co. 2-10	Box 622, Conneaut	Ohio
CONTROLLED ATMOSPHERE ENCLOSURES MFG CO. 10		
Adv Pg 38	Leonard Air Base, Hartsons	Fla
Corning Glass Works, Shielding Radiation, 7-13	Corning	NY
D. I. G. I. Nuclear Corp. 9	Via A. Bechini 30, Milan	Ital
Dynatron Radio Ltd., 9	St. Peter's Rd. Parsa Place, Maidenhead, Berks	Eng
Eidow Lead Co. 2-8-9-11	720 Bank St. Columbus 16	Ohio
Electric Boat Div. Gen. Dynamics Corp. 3	Industrial Services Dept. 004, Groton	Conn
Electronics Mon Ste d', 13	11 rue Petit, Clichy Seine	Fr
Endecott & Son Ltd., H. L. 8-9-11-12-10	South Pl. London, EC3	Eng
Equipment Aeronautica Brasileira Ltda. 11	Box 2084, Rio de Janeiro	Bras
Futh & Co. Ltd., M. 11	Zenith House, Reigate, Surrey, Eng	
Frenzel Metallurgical Corp. 14	North Chicago	Ill

Fansteel-Huntingdon Co. Inc. 1-9-9-9-10-11-12	Ansonia	Conn
Federated Metals Canada Ltd. 8-9-11-12-13	1400 Norman St. Lachine	Que
Fluth Smelting Inc. 14	8113 Forbes Ave. Pittsburgh 20	Pa
FUSS-SCHUMAN CORP. 7, Adv Pg 224	78 Furman Rd. New Rochelle	NY
Gamma Industrie, 11	32 Rue de Dunkerque, Paris 9, France	
Garrett Corp. 10	9851 Sepulveda Blvd, Los Angeles 45	Cal
General Dynamics/Fort Worth, 2-3-10	Box 748 Fort Worth 1	Tex
GENERAL ELECTRIC CO. APPARATUS SALES, 3,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Nuclear Corp. 8-9	2202 S Cypress Ave, Fullerton	Cal
Grace & Co., W. R. Davison Chemical Div. 3-5-14	Erwin	Tenn
Harry Co., Inc. R. V., 9-11-12-13	9409 Sloman Ave. Detroit 11	Mich
Haveg Industries Inc. 2-10	900 Greenbank Rd. Wilmington 8	Del
Hoering-Hoil-Morris Safe Div., Diebold Inc., 12-13	Hamilton	Ohio
Hitachi, Ltd. J	1-6 Marunouchi, Chiyoda-ku, Tokyo	Jap
Hunsler Precision Engrg. Ltd. 11	Leeds 10	Eng
INSTRUMENT & DEVELOPMENT PRODS CO. 3,		
Adv Pg 284	353 W 10th Pl. Chicago	Ill
Instruments Inc., 8-12	Box 666, Tulsa	Okla
Intercoke-Propak, 6-8	688 Union Commerce Bldg.Cleveland 14	Ohio
Isotope Accessories Co., 13	6812 Westchester Ave. Phila 51	Pa
ISOTOPE DEVELOPMENTS LTD, 6-11,		
Adv Pg 24	Bath Rd. Beaconsfield, Reading, Berks	Eng
Isotopes Specialties Co. 9-12	Box 608, Burbank	Cal
Ital Electronics S.p.A. 8-13	Via Ignazio Pettinengo 38, Roma	Ital
JENAER GLASWERKSCHUTT & GEN. 7-12,		
Adv Pg 113-8	18 Hermannstr. Main/Rhein	W Ger
JOHNSON & ASSOCIATES, INC. WILLIAM B. R.		
Adv Pg 226	Box 415, Mountain Lakes	NJ
Kelley & Co., G. G. 1-3-8-9-11-13	16 Tapley St. Boston 22	Mass
Kennecott Inc.	Lacoste	Pa
Knapp Construction Co., Andrew, 8-9-10-15-16	25-15 Borden Ave, Long Island City 1	NY
Knapp Mills, Inc., 1-8-8-8-9-10-11-15-16	25-15 Borden Ave. LIC 1	NY
Kohe Kogyo Corp. 10	1-2 Wakayama-Cho, Hyogo-ku, Kobe	Jap
KRUEGER FABRICATING CO. INC. 3,		
Adv Pg 222	Box 1294, Madison 1	Wis
Kuhlmann, Ets. 13	35 bd de l'Amiral-Bruix, Paris 16e	Fr
Laidlaw Boiler & Engineering Corp 1-12-13	2201 S Wabash Ave, Chicago 6	Ill
Lead Fabricators, Inc. 1-3-8-9-11-13	25 Belgrove Dr, Kearny	NJ
LEAD PRODUCTS, INC. 8-9, Adv Pg 230	Hartford Rd. Manchester	Conn
Lignasense Import Co. 9-13	Box 68, Grand Sta. New York 10	NY
Lincoln Foundry Corp. 12	2323 E 49th St, Los Angeles	Cal
Magnetic Shield Div. Perfection Mica Co. 13	1302 N Elston Ave. Chicago 22	Ill
Mass Mfg. Co, Inc. 13	200 Burlington Rd. Clarendon Hills	Ill
MARTIN CO. NUCLEAR DIV. 3, Adv Pg 5	Baltimore 3	Md
Material Service Div. Gen. Dynamics Corp. 4-8	300 W Washington St, Chicago 6	Ill
Mason Construction Co, Inc, 6	2000 Far Hills Ave, Dayton 19	Ohio
METAMITE METAL CORP. 14,		
Adv Pg 62	714 North Ave. New Rochelle	NY
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC. 5,		
Adv Pg 2	Box 698, Attleboro	Mass
METHEE, INC. 11-12, Adv Pg 10	Box 223, Westfield	Ill
MICHIGAN CHEMICAL CORP. RARE EARTH & THORIUM DIV. 16-25-14,		
Adv Pg 119	St. Louis	Mich
Micro Circuits Co. 10	New Buffalo	Mich
NATIONAL ANNEALING BOX CO. 3,		
Adv Pg 104	Box 230, Washington	Pa
NATIONAL LEAD CO. 1-3-5-6-8-9-11-12-14,		
Adv. Pgs. 89, 91	111 Broadway, New York 6	NY
NEWBROSH MACHINE CORP. 3,		
Adv Pg 93	Elmira Grand	NY
Nopco Chemical Co. 10	175 Schuyler Ave. North Arlington	NJ
NUCLEAR, INC. 8-9, Adv Pg 228	150 Pacific St. Cambridge	Mass
NUCLEAR-CHICAGO CORP. 3,		
Adv. Pgs. 34-37	341 E Howard Ave. Des Plaines	Ill
Nuclear Consultants Corp. 8	9840 Manchester Rd. St. Louis 19	Mo
NUCLEAR MEASUREMENTS CORP. 3-11,		
Adv Pg 237	2460 N Arlington Ave. Indianapolis 18	Ind
Nuclear Metals, Inc. 2-9	Box 220 Concord	Mass
Nuclear Research Applications Ltd, 8-13	Bell St, Reigate, Surrey, England	
NUCLEAR SHIELDING SUPPLIES & SERVICE INC 4-6,		
Adv Pg 116	175 Main St. White Plains	NY
Nuclear Technology Corp. 1-8-8-9-11-14	55 Church St, White Plains	NY
NUCLEAR UTILITY SERVICES, INC., 3,		
Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
NUCLEONIC CORP. OF AMERICA, 8-13,		
Adv Pg 202	196 Dupont St. Brooklyn 31	NY
Ohio Nuclear Inc. 9-9-13	17100 Knickerbocker Rd. Cleve 40	Ohio
Ohmart Corp. 13	5226 Hogan St, Cincinnati 22	Ohio
Optical Works Ltd, 7	31 The Mall, Ealing W5	Eng
Oregon Metallurgical Corp., 2-14	Box 484, Albany	Ore
Ouvrages Lemonnier & de Coninckin SA, 12 rue des Mariaux 8-9-13	54 rue des Fabriques, Brussels	Belg
PACIFIC COAST ENGINEERING CO. 1-2-11-12,		
Adv Pg 209	Denver 2, Alameda	Cal
Panax Equipment, Ltd. 8	Helmethorpe Ind. Est. Redhill, Surr. Eng	
Panatrons Ltd. 8	8A Princes St. Hanover Sq. London W1	Eng
Pasilio Co. 13	67 Stewart Ave. Brooklyn 37	NY
PENBERTHY RETIREMENT CO. 13,		
Adv Pg 227	4701 Aurora St. Seattle 8	Wash
Perkin-Elmer Corp. 13	Norwalk	Conn
Permaglo Corp. of America, 10	30-40 48th St. Woodside	NY
PERMALI, INC. 2-10-12, Adv Pg 197	Box 718, Mt. Pleasant	Pa
PHOENIX-RHEINROHR AG, 11, Adv Pg 27	August-Thyssen-Str 1, Duesseldorf	Ger
Picker X-Ray Corporation, 8-11	1275 Mamaroneck Ave. White Plains	NY
Pittsburgh Plate Glass Co. 7-13	632 Fifth Duquesne Blvd, Pittsburgh 22	Pa
Plastimayd Corp. 10	2204 SE 7th Ave, Portland 14	Ore
Polycast Corp. 10	69 Southfield Ave, Stamford	Conn
PRATT CO., WHITY, 12, Adv Pg 223	319 W Van Buren, Chicago 7	Ill
RADIATION COUNTER LABS. INC. 8-11,		
Adv. Pgs. 82, 83	5122 W Grove St. Skokie	Ill
RADIATION EQUIP. & ACCESSORIES CORP. 8-11,		
Adv. Pg. 3rd Cover	460 Merrick Rd. Lynbrook	NY
RADIATION INSTRUMENT DEVELOPMENT LAB. 8,		
Adv. Pgs. 216, 218A-D	61 E North Ave. Northlake	Ill
Radiation Products, Inc. 1-8-9-8-9-11-12 19	Pl. 40 Bd. Flushing 58	NY
RADIUM CHEMICAL CO. INC. 8-11,		
Adv Pg 12	161 E 42nd St. New York 17	NY
RAY-PROOF CORP. 1-4-6-7-8-9-10-11-13-13,		
Adv Pg 228	882 Canal St. Stamford	Conn
REACTOR EXPERIMENTS, INC. 2-8-10,		
Adv Pg 26	140 Harlan Blvd. Belmont	Cal
Reliance Incorporated 3-8	2210-2212 Adams Ave, Phila 36	Pa
Research Equipment Co. 13	502 Sunnyside, Wheaton	Ill
SAINT-GOBAIN NUCLEAIRE, 3-6-7-8-9-10-11-12-13,		
Adv Pg 229	23 Bd G. Clemenceau, Courbevoie, Seine	Fr
SELO, 8-9-11	Via Teodosio 27, Milan	Ital
Semi-Elements Inc. 10	Saxonburg Blvd, Saxonburg	Pa
SHARP LABORATORIES, INC. 8,		
Adv Pg 86	Box 1282, La Jolla	Cal
Simmering-Graz-Pauker AG, 1-8	Simmeringer Haupstr. 38, Vienna 7	Aus
Snyder Mfg. Co. Inc., 10	Box 404, New Philadelphia	Ohio
Stanray Corp. 3	200 S Michigan Ave. Chicago 4	Ill
Sumner Sollitt Co. 8	307 N Michigan Ave. Chicago 1	Ill
SYLCOR DIV. SYLVANIA ELEC PRODS. INC. 3,		
Adv Pg 30	Castlegate Road Rd. Stokesville	NY
Taylor Fibre Co. 10	Norristown 40	Pa
TECHNICAL ASSOCIATES, 3-8-11,		
Adv Pg 235	140 W Providencia Ave. Burbank	Cal
Technical Operations, Inc, 13	South Ave. Burlington	Mass
Telectro Industries Corp., 2-10-14	35-16 37th St. LIC 1	NY
TRACERLAB, INC. 8-11,		
Adv. Pgs. 134, 113-6	1601 Trapelo Rd. Waltham 54	Mass
TURZILLO CONTRACTING CO., LEE, 4,	1529 Riverview Rd. Box 155, Brecksville 41	Ohio
Adv Pg 238		
UNITED NUCLEAR CORP. 1-3-3-4-5-6-7-8-9-10-11-12-13-14,		
Adv Pg 25	383 Woodmere Ave. New Haven 4	Conn
U. S. NUCLEAR CORP. 2-3-5-8-9-11,		
Adv Pg 127	887 N Lake St. Box 2022, Burbank	Cal
Victor Chemical Works, 6-8	180 N Wacker Dr. Chicago 6	Ill
WESTLAKE PLASTICS CO. 3,18,		
Adv Pg 238	Box 38, Lansdale Mills	Pa
Willamette Iron & Steel Co. 3	2587 NW Front Ave, Portland	Ore

SHIELDS—MAGNETIC

Ace Engineering & Machine Co. Inc.	Tomlinson Rd. Huntington Valley	Pa
ALLIED ENGINEERING & PRODUCTION CORP.,		
Adv Pg 242	2625 Blanding Ave. Alameda	Cal
Hallett Mfg. Co.	3710 Beecroft St. Los Angeles 16	Cal
Magnetic Shield Div. Perfection Mica Co.	1302 N Elston Ave. Chicago 22	Ill
Micro Circuits Co.	New Buffalo	Mich
Milton Mfg. Co., James	150 Exchange St. Malden	Mass
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 107	Eindhoven	Neth
RAY-PROOF CORP. Adv Pg 228	882 Canal St. Stamford	Conn

SHIELDS—R-F

Ace Engineering & Machine Co. Inc.	Tomlinson Rd. Huntington Valley	Pa
ALLIED ENGINEERING & PRODUCTION CORP.,		
Adv Pg 242	2625 Blanding Ave. Alameda	Cal
AMERAY CORP., Adv Pg 119	Route 46, Kenvil	NJ
Auburn Mfg. Co.	109 Stack St. Middletown	Conn
Ercona Corp. Scientific Instrument Div.	18 W 45th St. New York 36	NY
Hallett Mfg. Co.	3710 Beecroft St. Los Angeles 16	Cal
Micro Circuits Co.	New Buffalo	Mich
Milton Mfg. Co., James	150 Exchange St. Malden	Mass
RAY-PROOF CORP. Adv Pg 229	882 Canal St. Stamford	Conn
Temperature Engineering Corp.	2200 Tempcor Blvd, Riverton	NJ
UNITED NUCLEAR CORP., Adv Pg 26	383 Woodmere Ave. New Haven 4	Conn

SHOWERS—EMERGENCY

See Also DECONTAMINATING EQUIPMENT

HAWS DRINKING FAUCET CO. Adv Pg 16	1439 Fourth St. Berkeley 10	Cal
Legan Emergency Showers, Inc.	130 N Maryland Ave, Box 111, Glendale	Cal

SIGNS—WARNING, RADIATION

Abbott Laboratories	Box 1008, Oak Ridge	Tenn
Ad-O-Plastic	360 Ainsley Ave. Woodbridge	NJ
Aremasters-Sunshine Corp.	111 W Jewel Ave. St. Louis 22	Mo
ATOMIC ACCESSORIES, INC., Adv Pg 204	811 W Merrick Rd. Valley Stream	NY
Beatrick Associates, Inc.	136 E 62nd St. New York 22	NY
Brady Co., W. H.	727 W Glendale Ave. Milwaukee 12	Wis
Budd Co. Instruments Div.	Box 245, Phoenixville	Pa
CHARLESTON NUCLEAR CO. Adv Pg 108	7 Stark Industrial Pk. Charleston	SC
CONTROLS FOR RADIATION, INC.		
Adv Pg 189	130 Alewife Brook Pkwy. Cambridge 40	Mass
D.I.S.I. Nuclear Corp.	Via A. Bordoni 30, Milan	Ital
Instruments Inc.	Box 666, Tulsa	Okla
Jem Pennsylvania Mfg. Corp	6 Haven Dr. Natick	Mass
JOHNSON & ASSOCIATES, INC., WILLIAM B.,		
Adv Pg 226	Box 415, Mountain Lakes	NJ
NUCLEAR-CHICAGO CORP.,		
Adv. Pgs. 34-37	341 E Howard Ave. Des Plaines	Ill
Nuclear Consultants Corp.	9843 Manchester Rd. St. Louis 19	Mo
NUCLEAR MEASUREMENTS CORP.,		
Adv Pg 237	2460 N Arlington Ave. Indianapolis 18	Ind
NUCLEONIC CORP. OF AMERICA,		
Adv Pg 202	196 Dupont St. Brooklyn 31	NY
Ohmart Corp.	5226 Hogan St, Cincinnati 22	Ohio
Panax Equipment, Ltd.	Helmethorpe Ind Estate, Redhill, Surrey	Eng
Picker X-Ray Corp.	25 S Broadway, White Plains	NY
RADIATION COUNTER LABS. INC.		
Adv. Pgs. 82, 83	5122 W Grove St. Skokie	Ill
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	460 Merrick Rd. Lynbrook	NY
READY MADE SIGN CO. INC. Adv Pg 241	155 North St. New York 13	NY
TRACERLAB, INC. Adv. Pgs. 134, 113-6	1601 Trapelo Rd. Waltham 54	Mass
U. S. NUCLEAR CORP., Adv Pg 127	887 N Lake St. Box 2022, Burbank	Cal
Volk Radiochemical Co.	8860 Elmwood Ave, Skokie	Ill

SILICON

See METALS, ALLOYS & COMPOUNDS

SILVER-CADMIUM-INDIUM

See METALS, ALLOYS & COMPOUNDS

SIMULATORS—POWER PLANT

See Also SERV. & CONS'LT: SIMULATORS, REACTOR & POWER PLANT-DESIGN

Bristol Instrument Corp.	129-03 14th Ave, College Point 56	NY
Dynatron Inc. Control Systems Div.	6656 Mildmar Rd. La Jolla	Cal
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 698, Groton	Conn
Electronic Associates, Inc.	Long Branch	NJ
HONEYWELL REG CO. HOL PRODS GROUP,		
Adv. Pgs. 126, 240	Wayne & Walnut Aves. Phila. 44	Pa
NUCLEAR UTILITY SERVICES, INC.,		
Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
Philbrick Researches Inc., George A.	127 Clarendon St, Boston 16	Mass
RCA SERVICE CO. NUCLEAR & SCIENTIFIC SERVICES,		
Adv Pg 31	Cherry Hill, Delaware Tp. Camden 8	NJ

SIMULATORS—REACTOR

See Also COMPUTERS—ANALOG
SERV. & CONS'LT: SIMULATORS, REACTOR & POWER PLANT-DESIGN

ABG, Adv Pg 113-4	Hochtaus, Frankfurt/Main, Germany	
Acoustic-General Mechanics	Box 77, San Antonio	Cal
Atomic Labs lab. Calif.	2008 Claremont Ave. Berkeley 5	Cal
BELGONUCLEAIRE, Adv Pg 113A	35 rue des Colonies, Brussels 1	Belg
Bell Telephone Mfg. Co.	25 Berkenrode, Hoboken/Antwerp	Belg
Curtis-Wright Corp. Electronics Div.	55 Marker St. East Paterson	NJ
Dynatron Inc. Control Systems Div.	6656 Mildmar Rd. La Jolla	Cal
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 698, Groton	Conn
Electronic Associates, Inc.	Long Branch	NJ
Electronique & Automatisme, ste d'	Conflans-Ste-Honorine	Fr
Hitachi, Ltd.	1-6 Marunouchi, Chiyoda-ku, Tokyo	Jap
Honeywell Controls, Ltd.	Vanderhoof Ave, Toronto, Ont Canada	
Lewis & Sterling Co.	4836 Stenton Ave, Phila 44	Pa
Lewis & Northrup Ltd.	Broad St, Birmingham 19	Eng
Link Div. - Gen. Precision, Inc.	Binghamton	NY
Milton Electronics Ltd.	Shambron Aept, Shambron, Essex, Eng	
HONEYWELL REG CO. HOL PRODS GROUP,		
Adv. Pgs. 126, 240	Wayne & Walnut Aves. Phila. 44	Pa
NUCLEAR UTILITY SERVICES, INC.,		
Adv Pg 7	1025 Connecticut Ave. N W, Wash 6	DC
Philbrick Researches Inc., George A.	127 Clarendon St, Boston 16	Mass
RCA SERVICE CO. NUCLEAR & SCIENTIFIC SERVICES,		
Adv Pg 31	Cherry Hill, Delaware Tp. Camden 8	NJ
Short Bros & Harland Ltd.	Queen Island, Belfast	N Ire
Siemens & Halske AG	Rheinbrueckenst. 50, Karlsruhe	Ger
Vickers-Armstrongs (S. Marston) Ltd.	Swindon, Wiltshire, England	
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. DEPT.		
Adv. Pgs. 70, 71	Pittsburgh	Pa

SINKS—LABORATORY

American Sterilizer Co.	Box 608, Erie	Pa
CONTROLLED ATMOSPHERE ENCLOSURES AFG CO		
Adv Pg 58	Leonard Air Base, Marianna	Fla
Dunlab Equipment Corp.	889 Linwood St, Brooklyn 8	NY
Federated Metals Canada Ltd.	1400 Norman St, Lachine	Que
Hamilton Mfg. Co.	Two Rivers	Wis
Kewaunee Mfg. Co.	2880 S Center St, Adrian	Mich
Knapp Construction Co., Andrew	25-15 Borden Ave, Long Island City 1	NY
Knapp Mills, Inc.	25-15 Borden Ave, LIC 1	NY
KRUEGER FABRICATING CO. INC.		
Adv Pg 222	Box 1294, Madison 1	Wis
Laboratory Furniture Co. Inc.	Old Country Rd. Mineola	NY
ROYAL RESEARCH CORP. Adv Pg 25	11824 Dublin Blvd. Hayward	Cal
Wasson Corp.	2801 Brighton Rd. Pittsburgh 12	Pa
WEI Corp.	Box 1080, Rochester 3	NY

SITE LOCATION

See SERV. & CONS'LT: SITE LOCATION

SITE MONITORS—RADIOACTIVITY
See Under MONITORS—RADIATION

SODIUM
See METALS, ALLOYS & COMPOUNDS

SOLENOIDS

A.E.I. Ltd.	30 Grosvenor Pl, London SW1,	Eng
Aero-Flow Dynamics, Inc.	Cotty	Pa
Automatic Switch Co.	50M Hanover Rd. Florham Park	NJ
Calmos Products Co.	3510 W Pico Blvd, Los Angeles 19	Cal
Camen Electric Canada Ltd.	105 Bartley Dr. Toronto 16	Can
De Alt Co.	504 N Laurel Ave, Des Plaines	Ill
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
General Electric Co. Ltd. of England	Erith, Kent, England	
Johnson Service Co.	Milwaukee 1	Wis
Kearns-Wagner Electric Co.	N Michigan & Marion, South Bend	Ind
Lenzonex Co. Inc., R. G.	134 Summit St. Tenafly	NJ
MC MARS CORPORATION, Adv. Pg 75	4400 Van Blvd. L.A. 41	Cal
Parker Aircraft Co	5007 W Century Blvd, Los Angeles 45	Cal
Phillips Controls (GB) Ltd.	270 Farnborough Rd, Farnborough, Hants	Eng
Standard Winding Co. Div. Diverse Corp.	44-02 Johnson St, Newburgh	NY
Tapco Div. Thompson Ramo Wooldridge Inc.	23666 Euclid Ave, Cleveland 17	Ohio
Telecto Industries Corp.	36-16 37th St, LIC 1	NY

SOLVENT-EXTRACTION COLUMNS
See COLUMNS—SOLVENT-EXTRACTION

SOURCES—RADIOACTIVE
See Also ACCELERATORS
IRRADIATORS—MEDICAL, ISOTOPIC
IRRADIATORS—PROCESS, ISOTOPIC
ISOTOPES—RADIOACTIVE
GENERATORS—NEUTRON
SERVICES: RADIOACTIVE-SOURCE ENCAPSULATION

1. ALPHA
2. BETA
3. GAMMA
4. NEUTRON
5. STANDARD

Abbott Laboratories, 5	Box 1080, Oak Ridge	Tenn
AMERICAN NUCLEAR CORP., 1-2-3-4-5, Adv Pg 180	Box 438, Oak Ridge	Tenn
Armstrong-Sunstone Corp. 1-2-3	111 W Jewel Ave, St. Louis 23	Mo
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV. 1-2-3-4-5, Adv. Pgs. 115, 221	Box 93, Ottawa, Ont	Can
ATOMIC RESEARCH LAB. DIV. ATOMIC CORP. OF AMERICA, 1-2-3-4-5, Adv Pg 184	10703 Jasmine St. Panorama City	Cal
Berwick Associates, Inc. 5	138 E 33rd St, New York 22	NY
Budd Co. Instrument Div. 3	Box 368, Phoenixville	Pa
California Corp for Biochemical Research, 2-5	3880 Medford St, Los Angeles 63	Cal
Canadian Radium & Uranium Corp. 1-2-3-4-5	600 5th Ave. New York 20	NY
Cerasom, 1	17 Bvd. de la Libération, St.Denis, Seine	Fr
ChemTisc Corp, 1-2-3-5	120 Alewife Brook Pkwy. Cambridge 40	Mass
Commissariat a L'Energie Atomique, 1-2-3-4-5	B.P. 2 Gif-sur-Yvette, S. O.	Fr
CONTROLS FOR RADIATION, INC. 1-2-3-5 Adv Pg 189	130 Alewife Brook Pkwy. Cambridge 40	Mass
Curtis Nuclear Corp. 5	1465 W 130th St, Gardena	Cal
D.L.S.I. Nuclear Corp. 1-2-3-4-5	Via A. Bonfiori 20, Milan	Ital
EBERLINE INSTRUMENT CORP. 1 Adv Pg 119	Box 239, Santa Fe	NM
FRANKLIN SYSTEMS, INC. 2-5 Adv Pg 230	2734 Hillsboro Rd. W Palm Beach	Fla
Gamma Industrie, 3	32 Rue de Dunkerque, Paris 9	Fr
Gamma Industries, Inc. 3	Box 5543, Baton Rouge	La
GENERAL ELECTRIC CO. APPARATUS SALES, 1-2-3-4-5, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
HAZLETON NUCLEAR SCIENCE CORP. 1-2-3-5, Adv Pg 78	4962 Fabian Way, Palo Alto	Cal
Institut for Atomenergi, 2-3	Box 170, Lillestrom, Kjeller	Nor
Instruments Inc., 3	Box 588, Tiffin	Ohio
ISO/SERVE INC. 1-2-3-5, Adv Pg 88	131 Portland St. Cambridge 39	Mass
Isotopes Specialties Co. 1-2-3-4-5	Box 808, Burbank	Cal
KAMAN NUCLEAR, 4, Adv. Pgs. 190, 191	Garden of the Gods Rd. Colo Springs	Colo
Knapp Mills, Inc., 2-4-5	23-15 Borden Ave. LIC 1	NY
Mound Laboratory, 1-5	Miamisburg	Ohio
NERATOMA, N. V., 1-2-3-4-5, Adv Pg 113-F	Hazelaarlaan 38, The Hague	Neth
New England Nuclear Corp. 1-2-3-5	575 Albany St, Boston	Mass
Nucleon Div. Nuclear Industries, Inc. 1-2-3-4-5	Box 5727, Bethesda 14	Md
NUCLEAR-CHICAGO CORP. 1-2-3-5, Adv. Pgs. 56-57	365 E Howard Ave. Des Plaines	Ill
Nuclear Consultants Corp. 1-2-3-4-5	1045 Manchester Rd. St. Louis 10	Mo
NUCLEAR MATERIALS & EQUIP. CORP. (NUMECO), 1-2-3-4-5, Adv. Pgs. 212, 216, 221	1888 Warren St. Apollo	Pa
Nuclear Research Associates, Inc. 5	30-16 Hoyens Pl, Ave, LIC 1	NY
Nuclear Research Corp. 3-4	Southampton	Pa
Nuclear Science & Engineering Corp., 3-5	Box 10001, Pittsburgh 30	Pa
NUCLEONIC CORP. OF AMERICA, 1-2-3-4-5, Adv Pg 202	196 Wagner St. Brooklyn 21	NY
OAK RIDGE NATL. LAB. ISOTOPES SALES DEPT. 1-2-3-4, Adv Pg 206	Box X, Oak Ridge	Tenn
Olmsted Corp. 3-5	2326 Rogers St, Cincinnati 23	Ohio
Pasco Equipment, Ltd., 5	Holmethorpe Ind. Est. Redhill, Surrey	Eng
Philips Electronic Instruments, 4	750 S Fulton Ave, Mt. Vernon	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. 1-2-3-5, Adv Pg 187	Eindhoven	Neth
Picker X-Ray Corp, 1-2-3-5	25 S Broadway, White Plains	NY
Radiation Applications, Inc. 5	36-40 37th St, Long Island City 1	NY
RADIATION COUNTER LABS. INC. 1-2-3, Adv. Pgs. 82, 83	5122 W Grove St. Skokie	Ill
RADIATION EQUIP. & ACCESSORIES CORP. 1-2-3-4-5, Adv. Pg. 3rd Cover	663 Seneca Rd. Lyndonvl	NY
RADIATION INSTRUMENT DEVELOPMENT LAB. 3, Adv. Pgs. 216, 220A-D	41 E North Ave. Northlake	Ill
RADIOCHEMICAL CENTRE, THE, 1-2-3-4-5, Adv Pg 182	White Lion Rd. Amersham, Buckinghamshire	Eng
RADION CHEMICAL CO. INC. 1-2-3-4-5, Adv Pg 12	141 E 42nd St. New York 17	NY
SELO, 5	Via Tendente 27, Milan	Ital
Technical Operations, Inc. 5	South Ave. Burlington	Mass
TERMINAL RADIO INTERNATIONAL LTD. 3-5, Adv Pg 113-C	240 W 17th St. New York 11	NY
TRACERLAB, INC. 1-2-3-5, Adv. Pgs. 134, 113-5	1601 Trapelo Rd. Waltham 54	Mass
U. S. NUCLEAR CORP., 1-2-3-4-5, Adv Pg 127	801 N Lake St. Box 2022, Burbank	Cal
U. S. RADION CORP. 1-2-3-4-5, Adv Pg 186	Box 246, Hackettstown	NJ
Volk Radiochemical Co. 1-2-3-5	2200 Elmwood Ave, Skokie	Ill
X-Ray Dept. of General Electric Co. 5	4855 Electric Ave, Milwaukee	Wis

SPACE TECHNOLOGY—NUCLEAR
See SERV. & CONS'LT: SPACE TECHNOLOGY

SPECTROGRAPHIC ANALYSIS
See SERV. & CONS'LT: SPECTROGRAPHIC ANALYSIS

SPECTROGRAPHS—LIGHT

Applied Research Labs. Inc.	Box 1750, Glendale 5	Cal
Berwick & Lomb, Inc.	55601 Lomb St. Rochester 3	NY
Beckman & Whitley Inc.	900 E San Carlos Ave. San Carlos	Cal
Eagle Equipment Co.	431 S Dearborn St. Chicago	Ill
Evans Corp. Scientific Instrument Div.	18 W 40th St. New York 18	NY
Hilger & Watts, Ltd.	98 St. Pancras Way, London NW 1	Eng
Jarrell-Ash Co.	18 Farwell St. Newtonville 60	Mass
M.B.L.E.	80 Rue des Deux Gares, Brussels 7	Belg
National Spectrographic Lab. Inc.	6300 Euclid Ave. Cleveland 3	Ohio

SPECTROMETERS—ALPHA & BETA RAY, MAGNETIC

Atomic Labs Ltd. Centre	3048 Claremont Ave, Berkeley 5	Cal
D.L.S.I. Nuclear Corp.	Via A. Bonfiori 20, Milan	Ital
Eagle Equipment Co.	431 S Dearborn St. Chicago	Ill
HIGH VOLTAGE ENGINEERING CORP. Adv Pg 179	5 Bedford St. Burlington	Mass
NERATOMA, N. V., Adv Pg 113-F	Hazelaarlaan 38, The Hague	Neth
RADIATION COUNTER LABS. INC. Adv. Pgs. 82, 83	5122 W Grove St. Skokie	Ill
RADIATION INSTRUMENT DEVELOPMENT LAB. Adv. Pgs. 216, 220A-D	41 E North Ave. Northlake	Ill
S. A. I. P.	30 Rue Gabriel Crie, Malakoff, Seine	Fr
TECHNICAL ASSOCIATES, Adv Pg 235	140 W Providencia Ave. Burbank	Cal
TRACERLAB, INC. Adv. Pgs. 134, 113-5	1601 Trapelo Rd. Waltham 54	Mass

SPECTROMETERS—MASS

Atlas Werke AG	Wulmsdorfer Str. 442/448, Bremen	Ger
Atomic Labs Ltd. Centre	3048 Claremont Ave, Berkeley 5	Cal
Bendix Corp. Cincinnati Div.	1130 Vonner Rd. Cincinn 5	Ohio
Biddle Co., James G.	1316 Arch St. Philadelphia 7	Pa
Consolidated Electrodynamics Corp.	300 Hanna Madre Villa, Pasadena	Cal
Crosley-Telemetron Corp.	54 Kimbel St. Westbury	NY
Dr. Vieweg KG	30 Braunschweig, Bremen	Ger
Eagle Equipment Co	431 S Dearborn St. Chicago	Ill
Gamma Industrie	32 Rue de Dunkerque, Paris 9, France	
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
HARVEY-WELLS NUCLEAR CORP. Adv Pg 201	43 Kendall St. Framingham	Mass
HIGH VOLTAGE ENGINEERING CORP. Adv Pg 179	5 Bedford St. Burlington	Mass
Hitachi, Ltd.	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
Ital Electronics S.p.A.	Via Ignazio Pettinengo 75, Roma	Ital
JOHNSTON LABS. INC., WILLIAM H., Adv Pg 189	2637 Bradford Ave. Baltimore 15	Md
KAMAN NUCLEAR, Adv. Pgs. 190, 191	Garden of the Gods Rd. Colo Springs	Colo
N.A.A., Adv Pg 89	Box 732, Boise College	Pa
Picker X-Ray Corporation	3270 Monroeville Ave, White Plains	NY
Process & Instruments Corp.	15 Gross Ave, Brooklyn 20	NY
THOMSON-HOUSTON (CIE. FRANCAISE), Adv Pg 112-D	173 Blvd. Haussman, Paris 8	Fr
Triumlab Reactor Monitoring Center	3620 Wright Ave, Richmond	Cal

SPECTROMETERS—NUCLEAR MAGNETIC RESONANCE

Atomation, Inc. Div. C. W. Reed Co Inc.	2000 S Hoover, Los Angeles 46	Cal
Atomic Labs Ltd. Centre	3048 Claremont Ave, Berkeley 5	Cal
D.L.S.I. Nuclear Corp.	Via A. Bonfiori 20, Milan	Ital
Eagle Equipment Co.	431 S Dearborn St. Chicago	Ill
HARVEY-WELLS NUCLEAR CORP. Adv Pg 201	43 Kendall St. Framingham	Mass
KAI Scientific Instrument Corp.	Box 1188, El Cajon	Cal
Lockheed Aircraft Corp.	Box 551, Burbank	Cal
NERATOMA, N. V., Adv Pg 113-F	Hazelaarlaan 38, The Hague	Neth
Perkin-Elmer Corp.	Norwalk	Conn
TECHNICAL ASSOCIATES, Adv Pg 235	140 W Providencia Ave. Burbank	Cal
Varian Associates	611 Hansen Way, Palo Alto	Cal

SPECTROMETERS—SCINTILLATION

American Trailair Corp. Sub. EECO Electronics, Ltd.	36-01 30th St, Long Island City 6	NY
Armstrong-Sunstone Corp.	111 W Jewel Ave, St. Louis 23	Mo
BAIRD-ATOMIC INC. Adv Pg 87	33 University Rd. Cambridge 38	Mass
Biddle Co., James G.	1316 Arch St. Philadelphia 7	Pa
Berwick Associates, Inc	138 E 33rd St, New York 23	NY
Curtis Nuclear Corp.	1465 W 130th St. Gardena	Cal
D.L.S.I. Nuclear Corp.	Via A. Bonfiori 20, Milan	Ital
Dynamic Radio Ltd.	St. Peter's Rd. Penn Place, Middlesbrough, Boro, Eng	
Eagle Equipment Co.	431 S Dearborn St. Chicago	Ill
Equipment Americas Brazilian Ltda.	Box 2086, Rio de Janeiro	Braz
FRANKLIN SYSTEMS, INC. Adv Pg 230	2734 Hillsboro Rd. W Palm Beach	Fla
GENERAL MEASUREMENTS, Adv Pg 23	83 Railroad Ave. Gainesville	NY
General Nuclear Corp	1501 S Cypress Ave, Fullerton	Cal
HAMNER ELECTRONICS CO. Adv Pg 213	Box 521, Princeton	NJ
HARSHAW CHEMICAL CO. Adv Pg 89	1945 E 97th St. Cleveland 6	Ohio
HORIBA INSTRUMENTS, INC. Adv Pg 207	Minamikasuishi Senju, Hokutyo, Kyoto	Jap
INTERTECHNIQUE S.A. Adv Pg 113-B	81 rue Escudier, Boulogne/Billancourt, Seine	Fr
Ital Electronics S.p.A.	Via Ignazio Pettinengo 75, Roma	Ital
Kohn Kagyo Corp.	1-6 Wakayama-Dori, Hyogo-ku, Kobe	Jap
Lab. Prof. Dr. R. Berthold	53 Calmbacherstr. Wildbad im Schwarzwald	Ger
LANDSVERK ELECTROMETER CO. Adv Pg 210	641 Sonora Ave. Glendale 1	Cal
L'Electronique Appliquee	55 rue de Docteur Finlay, Paris 15	Fr
Lockheed Aircraft Corp	Box 551, Burbank	Cal
NERATOMA, N. V., Adv Pg 113-F	Hazelaarlaan 38, The Hague	Neth
NUCLEAR-CHICAGO CORP., Adv. Pgs. 56-57	365 E Howard Ave. Des Plaines	Ill
NUCLEAR CORP OF AMERICA, WEST & CEN DIV. Adv Pg 94	2 Richmond Pl, Denville	NJ
Nuclear-Electronics Corp.	2903 N Broad St. Philadelphia 32	Pa
Nuclear Enterprises (GB) Ltd.	Sighthill, Edinburgh 11	Scot
NUCLEAR MEASUREMENTS CORP. Adv Pg 237	2460 N Arlington Ave. Indianapolis 18	Ind
NUCLEONIC CORP. OF AMERICA, Adv Pg 202	196 Wagner St. Brooklyn 21	NY
PACKARD INSTRUMENT CO. INC. Adv. Pgs. 84, 85	Box 428, La Grange	Ill
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 187	Eindhoven	Neth
Picker X-Ray Corporation	3270 Monroeville Ave, White Plains	NY
Pontecchio & Co. oHG	Box 2705, Frankfurt/Main 1	Ger
RADIATION COUNTER LABS. INC. Adv. Pgs. 82, 83	5122 W Grove St. Skokie	Ill
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	663 Seneca Rd. Lyndonvl	NY
RADIATION INSTRUMENT DEVELOPMENT LAB. Adv. Pgs. 216, 220A-D	41 E North Ave. Northlake	Ill
RADIATION TECHNOLOGY, INC. Adv. Pg. 3rd Cover	457 Antone St. NW, Atlanta 18	Ga
Radio Corp. of America Industrial Electronic Prods.	Front & Cooper Sts, Camden 2	NJ
S. A. I. P.	30 Rue Gabriel Crie, Malakoff, Seine	Fr
SELO	Via Tendente 27, Milan	Ital
Siemens & Halske AG	Rheinbruchstr. 50, Karlsruhe	Ger
Siemens-Reiniger-Werke AG	Lazarettstr. 65, Erlangen	Ger
TECHNICAL MEASUREMENT CORP. Adv Pg 63	447 Washington Ave. North Haven	Conn
TERMINAL RADIO INTERNATIONAL LTD. Adv Pg 113-C	240 W 17th St. New York 11	NY
TRACERLAB, INC. Adv. Pgs. 134, 113-5	1601 Trapelo Rd. Waltham 54	Mass

SPECTROPHOTOMETERS

American Instrument Co. Inc.	8030 Georgia Ave. Silver Spring	Md
Applied Physics Corp.	3756 S Peck Rd. Monrovia	Cal
Bausch & Lomb, Inc.	55601 Lomb St. Rochester 2	NY

Biddle Co., James G.	1316 Arch St, Philadelphia 7	Pa
Dr. Vieu KG	20 Rosenhagweg, Bonn	Ger
Engis Equipment Co.	431 S Dearborn St, Chicago	Ill
Equipment Atomicos Brasileiro Ltda.	Box 2384, Rio de Janeiro	Braz
Erceon Corp. Scientific Instrument Div.	16 W 46th St, New York 36	NY
GELMAN INSTRUMENT CO. Adv Pg 233	Box 1119-H, Chelsea	Mich
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
Hilger & Watts, Ltd.	98 St, Pancras Way, London NW 1, Eng	
Instrument Development Labs, Inc.	67 Mechanic St, Attleboro	Mass
LAND-AIR INC. SUB. DYNALECTRON INC. Adv Pg 204	7464 W Wilson Ave, Chicago 31	Ill
National Instrument Labs, Inc.	862 Fourth St, NE, Washington	DC
National Spectrographic Lab. Inc.	6300 Euclid Ave, Cleveland 3	Ohio
NERATOM, N. V., Adv Pg 113-F	Hoendiende 38, The Hague	Neth
Perkin-Elmer Corp.	Norwalk	Conn
Perkin-Elmer Corp. Electro-Optical Div.	1070 E Washington Blvd, L A 22	Cal
Process & Instrument Corp.	15 Stone Ave, Brooklyn 29	NY
Thomas Co., Arthur H.	Vine St at 3rd, Philadelphia 5	Pa

SPEED CONTROLS
See CONTROLS—SPEED

SPRINGS

Alco Products, Inc.	Box 1085, Schenectady 4	NY
Berger Pipesnapper Corp.	50 Church St, New York	NY
Hardwick-Hawkert Ltd.	44 Tower Hill, London EC3, England	
U. S. STEEL CORP., Adv. Pgs. 50, 51	525 Wm. Penn Pl, Pittsburgh 30	Pa

STAINLESS STEEL
See METALS, ALLOYS & COMPOUNDS
PIPE & TUBING

STATOR SHELLS
See SHELLS—STATOR

STEAM GENERATORS—POWER-PLANT
See Also HEAT EXCHANGERS

Advanced Technology Labs.	300 Whisman Rd, Mountain View	Cal
Alco Products, Inc.	Box 1085, Schenectady 5	NY
Atelsen, Nuclear Div.	38, Ave, Kleber, Paris 16, France	
BABCOCK & WILCOX CO. Adv. Pgs. 34, 35	161 E 42 St, New York 17	NY
Babcock & Wilcox Ltd.	209 Euston Rd, London NW 1, England	
Bigelow Co.	Box 708, New Haven 3	Conn
Canadian Westinghouse Co. Ltd.	Box 510, Hamilton, Ontario, Canada	
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 600, Groton	Conn
FOSTER WHEELER CORP. Adv Pg 130	666 5th Ave, New York 19	NY
Grissom-Russell Co.	Massillon	Ohio
Laclede Boiler & Engineering Corp.	5801 S Wallace Ave, Chicago 6	Ill
NERATOM, N. V., Adv Pg 113-F	Hoendiende 38, The Hague	Neth
Oil & Southwest, Inc.	976 Morgantown Rd, Reading	Pa
Riley Stoker Corp.	9 Neponset St, Worcester 6	Mass
Sonnenring-Gas-Pauker AG	Sonnenringer Hauptst. 38, Vienna 7	Aus
Smith Corp., A. O., Atomic & Process Equip. Div.	3000 N 27 St, Milwaukee 1	Wis
Socian Fives-Pauker	360 rue Saint-Honore, Paris 1, France	
SOCIETE RATEAU, Adv Pg 113-T	Rue Rateau La Courneuve, Seine	Fr
Sulzer Bros. Ltd.	Winterthur	Swit
Tosi, S.p.A., Franco	Legnano, Milan	Ital
Vogt Machine Co., Henry	1400 W Crosby St, Louisville	Ky
WESTINGHOUSE ELEC CORP. STEAM DIV. Adv. Pgs. 70, 71	Lester	Pa
WORTHINGTON CORP. Adv. Pg. 2nd Cover	401 Worthington Ave, Harrison	NJ

STEAM SEPARATORS—POWER-PLANT

Advanced Technology Labs.	300 Whisman Rd, Mountain View	Cal
Atelsen, Nuclear Div.	38 Ave. Kleber, Paris 16	Fr
BABCOCK & WILCOX CO. Adv. Pgs. 34, 35	161 E 42 St, New York 17	NY
Babcock & Wilcox Ltd.	209 Euston Rd, London NW 1, England	
Cochrane Corp.	3234 17th St, Philadelphia 32	Pa
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 600, Groton	Conn
FOSTER WHEELER CORP. Adv Pg 130	666 5th Ave, New York 19	NY
Riley Stoker Corp.	9 Neponset St, Worcester 6	Mass
Sonnenring-Gas-Pauker AG	Sonnenringer Hauptst. 38, Vienna 7	Aus
Societe Fives-Pauker	360 rue Saint-Honore, Paris 1, France	
Sulzer Bros. Ltd.	Winterthur	Swit
Tosi, S.p.A., Franco	Legnano, Milan	Ital
WESTINGHOUSE ELEC CORP. STEAM DIV. Adv. Pgs. 70, 71	Lester	Pa

STEEL
See METALS, ALLOYS & COMPOUNDS

STILLS—LABORATORY
See Also DISTILLATION EQUIPMENT

American Sterilizer Co.	Box 620, Erie	Pa
Aqua-Chem, Inc.	226 N Grand Ave, Waukesha	Wis
Consolidated Vacuum Corp.	1775 Mt. Read Blvd, Rochester	NY
Corning Glass Works, Shielding Radiation	Corning	NY
Gallenkamp & Co. Ltd., A.	Sun St, London, E. C. 2, England	
General Scientific Equipment Co.	Limekiln & Williams, Philadelphia 50	Pa
Paterson Foundry & Machine Co.	East Liverpool	Ohio
Scheco Scientific Div. Schenier & Co.	75 Cliff St, New York 38	NY
Scientific Glass Apparatus Co., Inc.	100 Lakewood Terr, Bloomfield	NJ
STOKES CORP., F. J. Adv Pg 241	5500 Tabor Rd, Philadelphia 20	Pa
WELCH SCIENTIFIC CO. Adv Pg 192	1515 Sedgwick St, Chicago 10	Ill

STIRRERS AND MIXERS

American Instrument Co. Inc.	8700 Georgia Ave, Silver Spring	Md
California Corp for Biochemical Research	3025 Medford St, Los Angeles 63	Cal
Corning Glass Works, Shielding Radiation	Corning	NY
Dorr-Oliver Inc.	77 Havemeyer Ln, Stamford	Conn
Eastern Industries Div. LFE, Inc.	100 Stiff St, Hamden 14	Conn
Gallenkamp & Co. Ltd., A.	Sun St, London, E. C. 2, England	
General American Transportation Corp.	135 S LaSalle St, Chicago 3	Ill
General Scientific Equipment Co.	Limekiln & Williams, Philadelphia 50	Pa
Mixing Equipment Co. Inc.	135 Mt. Read Blvd, Rochester 5	NY
Paterson Foundry & Machine Co.	East Liverpool	Ohio
Pfaudler & Son Ltd, Eagle Iron Works	Roxbury, Berlin, England	
Scheco Scientific Div. Schenier & Co.	75 Cliff St, New York 38	NY
Scientific Glass Apparatus Co., Inc.	100 Lakewood Terr, Bloomfield	NJ
STOKES CORP., F. J. Adv Pg 241	5500 Tabor Rd, Philadelphia 20	Pa
WELCH SCIENTIFIC CO. Adv Pg 192	1515 Sedgwick St, Chicago 10	Ill
Will Corp.	Box 1050, Rochester 5	NY

STRAINERS—STEAM

Atwood & Morrill Co.	Salem	Mass
Automatic Switch Co.	50M Hanover Rd, Florham Park	NJ
Cazal Ltd., Francis	Africa House, Kingsway, London WC 2, Eng	
Mech Iron Works Co.	Warren & Water Sts, Sandusky	Ohio
Newark Wire Cloth Co.	351 Verona Ave, Newark 4	NJ
Pall Corp.	Glen Cove	NY
Sarco Co. Inc.	635 Madison Ave, New York 22	NY
Tosi, S.p.A., Franco	Legnano, Milan	Ital
Watson Ltd., H. T.	Gorney Ln, Widnes, Lancashire	Eng
Watts Regulator Co.	10 Embankment St, Lawrence	Mass
Yarnall-Waring Co.	100 E Mermaid Ln, Phila 18	Pa

STRESS ANALYSIS
See SERV. & CONS'LT: STRESS ANALYSIS

STRESS-ANALYSIS EQUIPMENT

BLH Corp. Electronics & Inst. Div.	42 4th Ave, Waltham 54	Mass
Consolidated Electrodynamics Corp.	200 Sierra Madre Villa, Pasadena	Cal
Consolidated Western Steel Div. U. S. Steel Corp.	Box 5015, Terminal Ann, L A 54	Cal
Gordon Co., Claud S.	619 W 30 St, Chicago 16	Ill
Hacker & Co. Inc., William J.	Box 646, West Caldwell	NJ
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Magnaflux Corp.	7300 W Lawrence, Chicago 31	Ill
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 107	Eindhoven	Neth
Research Inc.	Box 6164, Edina Sta, Minpls 24	Minn
Siemens & Halske AG	Rheinbrueckenstr. 50, Karlsruhe	Ger
Sulzer Bros. Ltd.	Winterthur	Swit

SUBCRITICAL ASSEMBLIES
See Also REACTORS

ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, Adv Pg 173-G	Charleroi	Belg
Atomics International Div. NAA Inc.	Box 309, Canoga Park	Cal
BABCOCK & WILCOX CO. Adv. Pgs. 34, 35	161 E 42 St, New York 17	NY
BELGONUCLEAIRE, Adv Pg 173-L	35 rue des Colonies, Brussels 1	Belg
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
Curtiss-Wright Corp, Princeton Div.	Box 110, Princeton	NJ
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. Adv Pg 209	Box 608, San Diego 12	Cal
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
Hitachi, Ltd.	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
JOHNSON & ASSOCIATES, INC., WILLIAM R., Adv Pg 229	Box 415, Hunterdon Lebon	NJ
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lockheed Aircraft Corp, Georgia Div.	1000 Hurkside Dr, NW, Atlanta 18	Ga
Miles Hivelt Ltd	Old Shoreham Rd, Shoreham-by-Sea, Sussex	Eng
NUCLEAR-CHICAGO CORP., Adv. Pgs. 54-57	360 E Howard Ave, Des Plaines	Ill
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC), Adv. Pgs. 197, 198, 199	1000 Green St, Apollo	Pa
Nukem, GmbH	Wolfgang am, Hanau/Main	Ger
REACTOR EXPERIMENTS, INC. Adv Pg 36	148 Harbor Blvd, Belmont	Cal
S.A.M.E.S., Adv Pg 236	21 rue Jean Moun, Grenoble, Isere	Fr
Siemens Schuckertwerke AG	Werner-von-Siemens Str. 50, Erlangen	Ger
Vickers-Armstrongs (S. Marston) Ltd.	Swindon, Wiltshire, England	

SUPERHEATERS—POWER-PLANT
1. COAL-FIRED
2. GAS-FIRED
3. OIL-FIRED

BABCOCK & WILCOX CO. 1-2-3, Adv. Pgs. 34, 35	161 E 42 St, New York 17	NY
Babcock & Wilcox Ltd, 1-2-3	209 Euston Rd, London NW 1, England	
Bigelow Co. 1-2-3	Box 708, New Haven 3	Conn
Combustion Engineering, Inc, 1-2-3	200 Madison Ave, New York 16	NY
FOSTER WHEELER CORP. 1-2-3 Adv Pg 130	666 5th Ave, New York 19	NY
Jackson & Moreland, Inc, 1-2-3	800 Park Square Bldg, Boston 16	Mass
Laclede Boiler & Engineering Corp, 1-2-3	5801 S Wallace Ave, Chicago 6	Ill
NERATOM, N. V., 1-2, Adv Pg 113-F	Hoendiende 38, The Hague	Neth
Riley Stoker Corp, 1-2-3	9 Neponset St, Worcester 6	Mass
Sonnenring-Gas-Pauker AG, 1-2-3	Sonnenringer Hauptst. 38, Vienna 7	Aus
Sulzer Bros. Ltd, 1-2-3	Winterthur	Swit
Tosi, S.p.A., Franco, 1-2-3	Legnano, Milan	Ital

SURVEY INSTRUMENTS—RADIATION
See DOSIMETERS—RADIATION
MONITORS—RADIATION

SWAGING MACHINES
See Under FABRICATING EQUIPMENT

SWITCHES

ARS, Adv Pg 113-A	Hoechstweg, Frankfurt/Main, Germany	
A.E.L. Ltd.	38 Gunterstone Pl, London SW7, Eng	
Aircraft Porous Media, Inc.	Glen Cove	NY
Allied Control Co. Inc.	2 E End Ave, New York 21	NY
Atelsen, Nuclear Div.	38, Ave, Kleber, Paris 16, France	
Automatic Electric Sales Corp.	Northlake	Ill
Automatic Switch Co.	50M Hanover Rd, Florham Park	NJ
Bendix Corp. Eclipse Pioneer Div.	Teterboro	NJ
Bristol Co.	Box 1790 NBC, Waterbury 20	Conn
CVC Equipment Ltd.	Kings Cir, Maidenhead, Berks, Eng	
Cosmic Electronics & Instruments, Inc.	1333 N Utica, Tulsa 10	Okla
Clark Controller Co.	1146 E 152 St, Cleveland 10	Ohio
Cole Electric Co.	8439 Stellar Dr, Culver City	Cal
Computer Instruments Corp.	92 Madison Ave, Hempstead	NY
Consolidated Controls Corp.	14 Durant Ave, Bethel	Conn
Control Products, Inc.	290 Ridgedale Ave, E Hanover	NJ
Cutler-Hammer, Inc.	412 N 12th St, Milwaukee 1	Wis
Devon Co.	800 W 1st, Pleasant Ave, Livingston	NJ
Denver Fire Clay Co.	Box 5610, Denver 17	Colo
Fleet Electronics Corp.	229-36 Jamaica Ave, Queens Village 28	NY
Electricite Mark Ste S'	11 rue Petit, Clichy Seine	Fr
Fairchild Controls Corp	225 Park Ave, Hicksville	NY
Fenwal Electric, Inc.	Industrial Pk, Rt, Plainview	NY
General Controls Co.	801 Allen Ave, Glendale 1	Cal
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd, Schenectady 5	NY
General Electric Co. Ltd. of England	Hirst, Kent, England	
Hitachi, Ltd.	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
Instrument Development Labs, Inc.	67 Mechanic St, Attleboro	Mass
Jennings Radio Mfg. Corp.	970 McLaughlin Ave, San Jose 8	Cal
Kulka Electric Corp.	633 S Fulton Ave, Mt. Vernon	NY
Lifescope Div. Gen. Precision, Inc.	Glendale 1	Cal
Markite Corp.	150 Waverly Pl, New York 14	NY
Micro Switch Div. Minneapolis-Honeywell Regulator Co.	Chicago & Spring Sts, Freeport	Ill
MINN-HONEYWELL REG CO. MPL PHOTO GROUP, Adv. Pgs. 136, 340	Wayne & Windrim Avns, Phila. 44	Pa
Muthead Instruments Inc.	441 Lexington Ave, New York 17	NY
Newark Industries Inc.	Box 1297, Bayonne	NJ
Oerlikon Engineering Co.	Zurich 50, Switzerland	
Ohmite Mfg. Co.	3661 Howard St, Skokie	Ill
Pall Corp.	Glen Cove	NY
Peebles & Co. Ltd., Brown, Electronics Div.	E Pilton, Edinburgh 5	Scot
Polyscientific Corp.	Box 4604, Blacksburg	Va
Pye & Co. Ltd., W. G.	York St, Cambridge, England	
Telecro Industries Corp.	35-16 37th St, LIC 1	NY
Tetra Engineering Co. Ltd.	North End Rd, Wembley, Middx	Eng
THERMAL ELECTRIC CO. INC. Adv Pg 289	Saddle Brook	NJ
TOKYO SHIBAURA ELECTRIC CO. LTD. Adv Pg 239	12 Tanaka-cho 1-Chome, Chiyoda-ku, Tokyo	Jap
Tomlen Balance Co.	35 Montagan, Clifton	NJ
Unimax Switch Div. Maxson Electronics Corp.	Iona Rd, Wallingford	Conn
Victric Control Equipment Ltd.	28 Souverie St, London E C 4	Eng
Wallace & Tiernan, Inc.	25 Main St, Belleville 9	NJ

TANKS—REACTOR
See CALANDRIAS—REACTOR
PRESSURIZERS—REACTOR
VESSELS—PRESSURE, REACTOR

TANKS—STORAGE
1. AQUEOUS, NONRADIOACTIVE
2. HEAVY-WATER
3. LIQUID-METAL
4. RADIOACTIVE-WASTE

Aerojet-General Nucleonics, 3 ..... Box 77, San Ramon ..... Cal
ALLIS-CHALMERS MFG. CO. 3-4,
Adv. Pgs. 109-111 ..... 931 S 70th St. Milwaukee ..... Wis
Associated Fertilizer Co. 1 ..... Box 6301, Erie ..... Pa
AVERY & SAUL CO. 1-2-3-4,
Adv Pg 73 ..... 115 Bridge Ave. Cambridge ..... Mass
Barbier, Benard & Turenne, Anc. Ets. 1-4 ..... 38 rue du Colonel, Paris 15e ..... Fr
Belge de Chimie Nucleaire, Sta., 4 ..... 38 rue des Colonies, Brussels ..... Belg
Bethlehem Steel Corp. 1 ..... 701 E 3rd St. Bethlehem ..... Pa
Black, Sivalls & Bryson, Inc. 1 ..... 7500 E 12 St. Kansas City 26 ..... Mo
CPC ENGINEERING CORP. 1, Adv Pg 226 ..... Box 36, Sturbridge ..... Mass
Canadian General Electric Co Ltd., 3 ..... 197 Park St. Peterborough, Ont. ..... Can
Cayuga Machine & Fabricating Co, Inc, 1 ..... 200 W Gould Ave. Depew ..... NY
Chicago Bridge & Iron Co. 1-2-4 ..... 332 S Michigan Ave, Chicago 4 Ill
Chiyoda Chemical Eng & Const Co Ltd 4 ..... 1-36, Shiba-Shirokane, Minato-Ku, Tokyo, Japan
Cochrane & Co. Annan, Ltd, 1-2 ..... 34 Victoria St. London SW1, England
Combustion Engineering, Inc. 1-2-3 ..... 200 Madison Ave. New York 16 ..... NY
Electric Boat Div. Gen. Dynamics Corp. 1-2-3-4 ..... Industrial Services Dept. 600, Groton ..... Conn
Fraser & Co. Ltd., W. J. 4 ..... Hemell Hill, Romford, Essex, England
General American Transportation Corp. 1 ..... 135 S LaSalle St. Chicago 3 Ill
Graver Tank & Mfg. Co. Div. Union Tank Car Co. 1-2-3-4 ..... 36 E Wacker Dr. Chicago 1 Ill
Hoeg Industries Inc. 1 ..... 900 Greenbank Rd. Wilmington 8 ..... Del
Horton Steel Works, Ltd. 1-2 ..... 26 Adelaide St. W. Toronto ..... Ont
Kelley & Co., O. G. 1-2-4 ..... 90 Taylor St. Boston 22 ..... Mass
Knapp Mills Inc. 3-4 ..... 33-15 Borden Ave, LIC ..... NY
KRUEGER FABRICATING CO. INC. 1,
Adv Pg 222 ..... Box 1284, Madison 1 ..... Wis
Lasher Boiler & Engineering Corp 1-2-3-4 ..... 3201 S Wolcott Ave. Chicago 8 Ill
Lead Fabricators, Inc. 4 ..... 23 Belgrove Dr. Kearny ..... NJ
Liquid Metals, Inc. 3 ..... Box 2888, Wexford ..... Mass
MEK Research Corp. 3 ..... Callery ..... Pa
Motherwell Bridge & Engrg. Co, Ltd, 1 ..... Box 4, Motherwell, Scotland
NATIONAL ANNEALING BOX CO. 1-2-3-4,
Adv Pg 104 ..... Box 520, Washington ..... Pa
NERATOM, N. V., 1-2-4, Adv Pg 112-F ..... Noordeinde 38, The Hague ..... Neth
Oronde Engines Ltd. 1-2 ..... Box 4035 Stn. A, Toronto ..... Can
Mueller Co Div Pfaudler Permutit Inc 1-4 ..... 1000 West Ave. Rochester 3 ..... NY
Pittsburgh-Des Moines Steel Co. 1-2-3-4 ..... Neville Island, Pittsburgh 25 ..... Pa
Radiation Products, Inc, 1-2-3-4 ..... Ft. 40 St. Flushing 52 ..... NY
Reliance Equipment 4 ..... 1213-1222 Adams Ave. Phila 24 ..... Pa
SAINT-GOBAIN MULTAIRE, 1-4,
Adv Pg 229 ..... 22 Bd G. Clemenceau, Courbevoie, Seine ..... Fr
Salem-Brosius Inc., 4 ..... Box 2222, Pittsburgh 30 ..... Pa
Sheldon & Co. Inc., M. L., 1 ..... 350 Lexington Ave. New York 16 ..... NY
Smith Corp., A. O., Atomic & Process Equip. Div. 4 ..... 5533 N 27 St. Milwaukee 1 ..... Wis
Societe Fives-Penhoet, 1-2-3-4 ..... 360 rue Saint-Honore, Paris 1, France
Sulzer Bros. Ltd, 1-2-4 ..... Winterthur ..... Switz
Thompson, Ltd., John, 1 ..... Wolverhampton ..... Eng
Vennes pour le Traitement des Eaux, S A 4 ..... 1 Quai des Vennes, Liege ..... Belg
WESTINGHOUSE ELEC CORP. STEAM DIV. 1,2-3-4,
Adv. Pgs. 70, 71 ..... Lester ..... Pa

TANTALUM
See METALS, ALLOYS & COMPOUNDS

TAPES—MAGNETIC-RECORDING
See Also RECORDERS—MAGNETIC-TAPE

Arnold Engineering Co. ..... Box G, Marengo Ill
Aromatic Corp. ..... 960 Main St. Waltham ..... Mass
Borg-Warner Controls Div. Borg-Warner Corp. ..... 3300 Newport Blvd. Santa Ana ..... Cal
Consolidated Electrodynamics Corp. ..... 360 Sierra Madre Villa, Pasadena ..... Cal
EMI Electronics Ltd. ..... Hayes, Middlesex ..... Eng
EMI/US, Adv Pg 49 ..... 1750 N Vine St. Hollywood 28 ..... Cal
Honeywell Controls, Ltd. ..... Vanderhoof Ave. Toronto, Ont Canada
NERATOM, N. V., Adv Pg 112-F ..... Noordeinde 38, The Hague ..... Neth
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 187 ..... Eindhoven ..... Neth
Pinney Electronics Ltd. ..... Newton Rd. Northampton ..... Eng
RADIATION INSTRUMENT DEVELOPMENT LAB.
Adv. Pgs. 216, 2304-D ..... 61 E North Ave. Northlake Ill
RADIO CORP. OF AMERICA, ELECTRON TUBE DIV.
Adv Pg 23 ..... 415 S 5th St. Harrison ..... NJ

TECHNICAL WRITING SERVICES
See SERV. & CONS'LT: TECHNICAL WRITING

TELEMETERING SYSTEMS

AEG, Adv Pg 113-A ..... Nuetheur, Frankfurt/Main, Germany
A.E.I. Ltd. ..... 33 Grosvenor Pl, London SW1, Eng
Aerojet Div Aerojet-General Corp ..... 410 N Citrus Ave, Covina ..... Cal
Airpax Electronics Inc. Seminole Div. ..... Ft. Lauderdale ..... Fla
American Bosch Arma Corp. ..... 589 Pulaski Ave, Hempstead ..... NY
Ametek-Standard Controls Div. ..... 2001 Thimbell, Detroit 2 ..... Mich
Applied Research (Instruments) Ltd. ..... Bracknell House, Reigate ..... Eng
B-I-F Industries, Div. HT Air Brake Co. ..... 228-31 Harris Ave. Providence 1 ..... RI
BAILEY METER CO. Adv Pg 49 ..... 29801 Euclid Ave. Wickliffe ..... Ohio
Bailey Meter Co. Ltd. ..... 5757 St. Catherine St. W. Montreal, Que Can
Beckman Instruments Inc. Systems Div. ..... 2400 Harbor Blvd. Fullerton ..... Cal
Bell Telephone Mfg. Co. ..... 33 Berkenrode, Hoboken/Antwerp ..... Belg
Bendix Corp Bendix Pacific Div. ..... 11600 Sherman Way, N Hollywood ..... Cal
Bristol Co. ..... Box 1790 HBG, Waterbury 90 ..... Conn
Computyne Corp. ..... 400 S Warminster Rd. Hatboro ..... Pa
Consolidated Electrodynamics Corp. ..... 360 Sierra Madre Villa, Pasadena ..... Cal
Control Data Corp. ..... 501 Park Ave. Minneapolis 15 ..... Minn
Dynatron Inc. Control Systems Div. ..... 4455 Mirimar Rd. La Jolla ..... Cal
Dell Electronics Ltd. ..... Hayes, Middlesex ..... Eng
EDGERTON, GERMESHAUSEN & GRIER, INC.
Adv Pg 105 ..... 160 Brookline Ave. Boston 15 ..... Mass
Electricite Mon Ste d' ..... 11 rue Petit, Clichy Seine ..... Fr
Electro-Mechanical Research, Inc. ..... Box 3061, Sarasota ..... Fla
Fairchild Camera & Instr. Corp. Defense Prods. Div. ..... 300 Robbins Ln. Syosset ..... NY
Fischer & Porter Co. ..... 50 Warminster Rd. Warminster ..... Pa
FOXBORO CO. Adv Pg 180 ..... 38 Neponset Ave. Foxboro ..... Mass
General Dynamics/Electronics ..... 195 Carlton Rd. Rochester 3 ..... NY
General Dynamics/Pomona ..... Box 1011, Pomona ..... Cal
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ..... 1 River Rd. Schenectady 5 ..... NY
Hogan Faximile Corp. Sub. Telautograph Corp. ..... 635 Greenwich St. New York 14 ..... NY
Honeywell Controls, Ltd. ..... Vanderhoof Ave. Toronto, Ont Canada
LABORATORY INS. SYSTEMS INC.
Adv Pg 204 ..... 7444 W Wilson Ave. Chicago 31 Ill
Leach Corp. ..... 18420 Susana Rd. Compton ..... Cal
Litton Industries ..... 336 N Foothill Rd. Beverly Hills ..... Cal
Lockheed Aircraft Corp. ..... Box 551 Burbank ..... Cal
NERATOM, N. V., Adv Pg 112-F ..... Noordeinde 38, The Hague ..... Neth
New London Instrument Co. Inc. ..... 81 Union St. New London ..... Conn
Philco Corp. Govt. & Ind. Gr. ..... 4700 Wissahickon Ave. Phila 44 ..... Pa
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 187 ..... Eindhoven ..... Neth
RADIATION TECHNOLOGY, INC.
Adv. Pg. 3rd Cover ..... 637 Antone St. NW, Atlanta 18 ..... Ga
S.T.A.E.R. ..... Via Ugo Bassi, 56, Rome ..... Ital
Siemens & Halske AG ..... Rheinbruchstr. 50, Karlsruhe, Germany
Specialty Electronics Devel. Corp. ..... 131-01 20th Ave. Flushing ..... NY
Sperry Phoenix Co. Div. Sperry Rand Corp. ..... 21111 N 19th Ave. Phoenix ..... Ariz
Standard Tel. & Cables Ltd. ..... 20 Glasshouse Yd. London EC 1 ..... Eng
SYSTEMS ENGINEERING LAB. INC.
Adv Pg 190 ..... Box 9148, Fort Lauderdale ..... Fla
Tayco Div. Thompson Ramo Wooldridge Inc. ..... 23555 Euclid Ave. Cleveland 17 ..... Ohio
Telecomputing Corp. ..... 8155 Aero Dr. San Diego 11 ..... Cal
Telectro Industries Corp. ..... 35-16 37th St. LIC 1 ..... NY
Tele-Dynamics Div Amer. Bosch Arma Corp ..... 1000 Parkside Ave, Phila 31 ..... Pa
TOKYO SHIBAURA ELECTRIC CO. LTD. ..... 12 Yurako-cho 1-Chome, Chiyoda-ku, Tokyo ..... Jap
Adv Pg 225
Vam Inc. ..... 2501 Walnut St. Garland ..... Tex
Victor Adding Machine Co. ..... 3900 N Rockwell St. Chicago 18 Ill
Waltham Electronics Corp. ..... 751 Main St. Waltham ..... Mass

TELETHERAPY EQUIPMENT—RADIATION
See IRRADIATORS—MEDICAL, ISOTOPIC

TELEVISION SYSTEMS—CLOSED-CIRCUIT

Admiral Corp. ..... 3800 W Cortland St. Chicago 47 Ill
Aerovox Div Aerojet-General Corp ..... 410 N Citrus Ave, Covina ..... Cal
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,
Adv Pg 112-D ..... Charleroi ..... Belg
Bell Telephone Mfg. Co. ..... 33 Berkenrode, Hoboken/Antwerp ..... Belg
Bendix Corp. Prime Instrument Div. ..... 1456 Taylor Ave, Baltimore 4 ..... Md
Century Electronics & Instruments, Inc. ..... 1333 N Utica, Tulsa 10 ..... Okla
Dage Television Div. Thompson Ramo Wooldridge Inc. ..... W 10th St. Michigan City ..... Ind
Dengyosha for Industry, Inc. ..... 4241 Fulton Pkwy, Cleveland 9 ..... Ohio
DIAMOND POWER SPECIALTY CORP.
Adv Pg 1 ..... Box 415, Lancaster ..... Ohio
Dynisco Div. Amer. Brake Shoe Co. ..... 42 Carleton St. Cambridge 42 ..... Mass
EMI Electronics Ltd. ..... Hayes, Middlesex ..... Eng
EMI/US, Adv Pg 49 ..... 1750 N Vine St. Hollywood 28 ..... Cal
Equipment Atomico Brasileiro Ltda. ..... Box 2984, Rio de Janeiro ..... Braz
Fairbanks, Morse & Co. ..... 580 Electric Ln. Teaneck ..... NY
Fairchild Camera & Instr. Corp. Defense Prods. Div. ..... 300 Robbins Ln. Syosset ..... NY
GPL DIV. GENERAL PRECISION INC.
Adv Pg 120 ..... 63 Bedford Rd. Pleasantville ..... NY
GENERAL ELECTRIC CO. APPARATUS SALES,
Adv. Pgs. 11, 13 ..... 1 River Rd. Schenectady 5 ..... NY
General Electric Co. Commun. Prods. Dept. ..... Lynchburg ..... Va
ITT LABS. COMPONENTS DIV.,
Adv Pg 207 ..... 3700 E Pontiac St. Fort Wayne ..... Ind
Kin Tel Div Cohu Electronics Inc. ..... 5725 Kearny Villa Rd. San Diego 23 ..... Cal
Lockheed Aircraft Corp. ..... Box 551 Burbank ..... Cal
Marconi's Wireless Telegraph Co., Ltd. ..... Chelmsford, Essex, England
NERATOM, N. V., Adv Pg 112-F ..... Noordeinde 38, The Hague ..... Neth
Philco Corp. Govt. & Ind. Gr. ..... 4700 Wissahickon Ave. Phila 44 ..... Pa
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.
Adv Pg 187 ..... Eindhoven ..... Neth
Photo Research Corp ..... 837 N Cahuenga Blvd, Hollywood ..... Cal
Pye, Ltd. ..... St. Andrews Rd. Cambridge, England
Radio Corp. of America Industrial Electronic Prods. ..... Front & Cooper St, Camden 2 ..... NJ
Siemens & Halske AG ..... Rheinbruchstrasse, 50, Karlsruhe, Germany
Special Instruments Laboratory, Inc. ..... 102 W Vine Ave. Knoxville 02 ..... Tenn
Spencer-Kennedy Labs. Inc. ..... 1400 Soldiers Field Rd. Boston 35 ..... Mass
Standard Tel. & Cables Ltd. ..... 20 Glasshouse Yd. London EC 1 ..... Eng
Stromberg (Corp. ..... 1717 N Highland Ave. Los Angeles 28 ..... Cal
Sylvania Elec Prods Inc. Home Electronics Div. ..... 700 Ellicott, Batavia ..... NY
Tayco Div. Thompson Ramo Wooldridge Inc. ..... 23555 Euclid Ave. Cleveland 17 ..... Ohio
Telectro Industries Corp. ..... 35-16 37th St. LIC 1 ..... NY
THOMSON-HOUSTON (CIE. FRANCAISE),
Adv Pg 113-D ..... 173 Blvd. Haussman, Paris 8 ..... Fr
TOKYO SHIBAURA ELECTRIC CO. LTD. ..... 12 Yurako-cho 1-Chome, Chiyoda-ku, Tokyo ..... Jap
Adv Pg 225

TEMPERATURE CONTROLS
See CONTROLS—TEMPERATURE
TRANSDUCERS—TEMPERATURE

TEST EQUIPMENT—DESTRUCTIVE

Alloys Research & Mfg. Corp. ..... 34-32 57th St, Woodside 77 ..... NY
Associated Testing Labs, Inc. ..... 134 St. 46, Wayne ..... NJ
AUTOCLAVE ENGINEERS, INC.,
Adv Pg 209 ..... 2930 W 22nd St. Erie ..... Pa
Budd Co. Instruments Div. ..... Box 245, Phoenixville ..... Pa
California Tech. Ind. Div. Tenney Inc. ..... 1021 Old County Rd. Belmont ..... Cal
Custom Scientific Instruments Inc. ..... 261 Dewes St. Kearny ..... NJ
Delta Design, Inc. ..... 5160 Adams Ave, San Diego 16 ..... Cal
Electric Boat Div. Gen. Dynamics Corp. ..... Industrial Services Dept. 600, Groton ..... Conn
Industrial Test Equipment Co. ..... 65 E 11th St. New York 3 ..... NY
Intron Engineering Corp. ..... 2200 Washington St. Canton ..... Mass
Hall & Thompson Ltd. ..... Wren Hse 8, Tolworth, Surbiton, Surrey ..... Eng
Oronde Engines Ltd. ..... Box 4035 Term A, Toronto ..... Can
Proctor Electronics, Inc. ..... St. 315, Tonawanda ..... NY
Research Inc. ..... Box 6184, Edina Sta. Minpls 24 ..... Minn
Robin Testing Machine Div. Amer Mach & Metals Inc. ..... East Moline Ill
Romanoff Controls Ltd. ..... 940 Decarcelle St. Montreal, Que ..... Can
TOKYO SHIBAURA ELECTRIC CO. LTD. ..... 12 Yurako-cho 1-Chome, Chiyoda-ku, Tokyo ..... Jap
Adv Pg 225
Tork Research Corp. ..... 1 Research Dr. Stamford ..... Conn
Zenith Electric Co. Ltd. ..... William Rd. London NW 1 ..... Eng

TEST EQUIPMENT—NONDESTRUCTIVE
See Also SERV. & CONS'LT: TESTING, NONDESTRUCTIVE

Aerojet-General Nucleonics ..... Box 77, San Ramon ..... Cal
Aircraft Equipment Testing Co. Inc. ..... 2111-19 Eastern Ave. Baltimore 21 ..... Md
Alcar Instruments ..... 411 Robbins Ave. Trenton 6 ..... NJ
Alloys Research & Mfg. Corp. ..... 34-32 57th St. Woodside 77 ..... NY
Amplifier Corp. of America ..... 398 Broadway, New York 13 ..... NY
Apparecchi Scientifici Federici ..... Via Monte 2, Milan ..... Ital
Assembly Products, Inc. ..... 78 Wilson Mills Rd. Chardon ..... Ohio
Associated Testing Labs, Inc. ..... 134 Rte. 46, Wayne ..... NJ
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV.,
Adv. Pgs. 110, 221 ..... Box 93, Ottawa, Ont ..... Can
Avery Electric, Ltd. ..... 1 Ockendon, Essex ..... Eng
Baldwin Industrial Controls ..... Dartford, Kent ..... Eng
Barnes Development Co ..... 213 W Baltimore Pike, Lansdowne ..... Pa
Bausch & Lomb, Inc. ..... 18402 Bausch St. Rochester 2 ..... NY
Bendix Corp Bendix Pacific Div. ..... 11600 Sherman Way, N Hollywood ..... Cal
BRANSON INSTRUMENTS, INC. Adv Pg 78 ..... 27 Brown House Rd. Stamford ..... Conn
Budd Co. Instruments Div. ..... Box 245, Phoenixville ..... Pa
California Tech. Ind. Div. Tenney Inc. ..... 1021 Old County Rd. Belmont ..... Cal
Cambridge Instrument Co., Ltd. ..... 13 Grosvenor Pl. London SW1, Eng
Cawkell Research & Electronics Ltd. ..... Scotts Rd. Southall, Middlex, Eng
Chesapeake Instrument Corp. ..... Shadyside ..... Md
Consolidated Electrodynamics Corp. ..... 360 Sierra Madre Villa, Pasadena ..... Cal
Consolidated Vacuum Corp. ..... 1775 Mt. Read Blvd. Rochester ..... NY
Curtiss-Wright Corp. Princeton Div. ..... Box 110, Princeton ..... NJ
Custom Scientific Instruments Inc. ..... 261 Dewes St. Kearny ..... NJ
Dewe Instruments Ltd. ..... Wessex Ave. Acton, London W3 ..... Eng
Delta Design, Inc. ..... 5160 Adams Ave. San Diego 16 ..... Cal
Designers for Industry, Inc. ..... 4041 Fulton Pkwy, Cleveland 9 ..... Ohio
Dinn Co., J. W. ..... Englewood 41 ..... NJ
Dresser Research Div. Dresser Ind. Inc. ..... 10700 Independence St. Tulsa ..... Okla
Dynisco, Div. Hewlett-Packard Co. ..... 396 Page Mill Rd. Palo Alto ..... Cal
Electric Boat Div. Gen. Dynamics Corp. ..... Industrial Services Dept. 600, Groton ..... Conn
Elton Instruments Inc. ..... 400 Buckley St. Bristol ..... Pa
Equipment Atomico Brasileiro Ltda. ..... Box 2984, Rio de Janeiro ..... Braz
Fairchild Semiconductor Corp. ..... 844 Whisman Rd. Mountain View ..... Cal
Falk & Co. Ltd., M. ..... Kendrick House, Reigate, Surrey, Eng
Flatbrach & Moore ..... Box 7788, Dallas 38 ..... Tex
FRANKLIN SYSTEMS, INC. Adv Pg 236 ..... 2734 Wilshire Rd. W Palm Beach ..... Fla
General Applied Science Labs. Inc. ..... Merrick & Stewart Ave. Westbury ..... NY
General Radio Co. ..... West Concord ..... Mass
Gin Bros. Mfg. Co. ..... 1040 S Kilbourn Ave. Chicago 23 Ill

Continuous Industries Ltd., Aniam Wks.	Wembley, Middx.	Eng
Harvey Electronics Ltd.	275 Farnborough Rd. Farnborough Hants.	Eng
NAZELTON-NUCLEAR SCIENCE CORP.		
Adv Pg 58	4062 Fabian Way, Palo Alto	Cal
Heath Co.	Benton Harbor	Mich
HIGH VOLTAGE ENGINEERING CORP.		
Adv Pg 179	5 Guilford St. Burlington	Mass
HUGHES AIRCRAFT CO. NUCLEONICS LAB.		
Adv Pg 203	Box 2097, Fullerton	Cal
Hycon Mfg. Co.	780 Royal Oaks Dr. Monrovia	Cal
Industrial Test Equipment Co.	66 E 11th St. New York 3	NY
Kahn & Co. Inc.	Box 516, Hartford 1	Conn
Kay Electric Co.	Maple Ave. Pine Brook	NJ
LAND-AIR INC. SUB. DYNALECTRON INC.		
Adv Pg 204	7404 N Ulman Ave. Chicago 31	Ill
Leach Corp.	10435 Sonora Rd. Compton	Cal
Lockheed Aircraft Corp	Box 551, Burbank	Cal
Lumenon Electronics, Inc.	116 County Courthouse Rd. New Hyde Park	NY
Magnaflux Corp.	7300 W Lawrence, Chicago 31	Ill
Maritime Chemical & Repair Corp.	420 Hamilton Ave. Brooklyn 32	NY
MELLON, INC. EUGENE T.		
Adv Pg 182	132 Nassau St. New York 38	NY
Minium Instrument Co.	10820 Madison Ave. Cleveland 5	Ohio
MINN-HONEYWELL REG CO. INDL. PRODS GROUP		
Adv. Pgs. 138, 249	Wayne & Windrim Aves. Phila. 44	Pa
Mitchell Radiation Products Corp.	2 Washington St. Morristown	Pa
Muirhead Instruments Inc.	441 Lexington Ave. New York 17	NY
Nash & Thompson Ltd.	Hook Rise S, Tolworth, Surbiton, Surrey	Eng
National Research Corp	70 Memorial Dr. Cambridge 42	Mass
New London Instrument Co. Inc.	82 Union St. New London	Conn
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),		
Adv. Pgs. 217, 219, 221	1000 Vermo St. Apollo	Pa
Nuclear Research Corp.	Southampton	Pa
Optics Technology Inc	548 Harbor Blvd. Belmont	Cal
Orenda Engines Ltd.	Box 6015 Term A, Toronto	Can
PACKARD INSTRUMENT CO. INC.		
Adv. Pgs. 84, 85	Box 428, La Grange	Ill
Pennwalt Ltd.	56 Princess St, Hanover Sq. London W1	Eng
Perkel Electronics, Inc.	Box 336, Teaneck	NY
Philips Electronic Instruments	750 S Fulton Ave. Mt. Vernon	NY
PHOENIX-GREENBERG AG, Adv Pg 27	August-Thyssen-Str 1, Dusseldorf	Ger
Picker X-Ray Corporation	1275 Mamaroneck Ave. White Plains	NY
Polyphase Instrument Co.	E 6th St. Bridgeport	Pa
Powerson Dynamics Corp.	Hawk. Ind. Pk. Plainview	NY
Precision Apparatus Co Inc.	70-31 84th St. Glendale 27	NY
Radiation Inc.	Lafayette & Water Sts. Morrisville	Pa
RADIUM CHEMICAL CO. INC. Adv Pg 12	161 E 42nd St. New York 17	NY
Ram Engineering, Inc.	A & Courtland, Philadelphia 20	Pa
Research Inc.	Box 6164, Edina Sta. Minpls 24	Minn
Rosemen Controls Ltd.	1480 Dorchester St. Montreal, Que. Can	
Siemens & Halske AG	Wernerwerkwerk, 60, Karlsruhe	Ger
Simpson Electric Co. Div. Assoc. Gage & Mach Co.	5200 W Kinzie St. Chicago 44	Ill
Solar-Schell, Ltd.	Honeypot Ln. Stanmore, Middx	Eng
Sperry Products Co.	Shelter Rock Rd. Danbury	Conn
Technical Operations	South Ave. Burlington	Mass
Technology Instrument Corp	521 Main St. Acton	Mass
Telecomputing Corp.	6155 Aero Dr. San Diego 11	Cal
Telluometer, Inc.	1346 Connecticut Ave. NW, Wash 6	DC
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 112-C	240 W 17th St. New York 11	NY
TOKYO SHIBAURA ELECTRIC CO. LTD.		
Adv Pg 225	12 Tsunko-cho 1-Chome, Chiyoda-ku, Tokyo	Jap
Trio Laboratories, Inc.	Plainview	NY
Trost Electronics, Inc.	415 Smith St, Rochester 8	NY
TURCO PRODUCTS, INC. Adv Pg 129	Box 1899, Whittier	Cal
Unit Process Assemblies	53-15 37th Ave. Woodside 77	NY
United Mfg. Div. W. L. Maxson Corp.	43 Haig St. Hamden 14	Conn
Vacuum Research (Cambridge) Ltd.	Quinpole, Bridge St. Cambridge, Eng	
Varian Associates	611 Hansen Way, Palo Alto	Cal
Waltham Electronics Corp.	753 Main St. Waltham	Mass
Wayne Kerr Corp.	1820 Race St. Philadelphia 3	Pa
Wheeler Electronic Corp.	100 E Avenue B, Waterbury 20	Conn
York Research Corp.	1 Research Dr. Stamford	Conn

TEST EQUIPMENT—REMOTE, HOT CELL

ASF ATOMICS, Adv. Pgs. 70, 77, 79	140 Greenwich Ave. Greenwich	Conn
Aerojet-General Nucleonics	Box 77, San Ramon	Cal
AMERICAN NUCLEAR CORP. Adv Pg 198	Box 428, Oak Ridge	Tenn
ATOMIC ENERGY OF CANADA LTD. COMMERCIAL PRODUCTS DIV.		
Adv. Pgs. 115, 231	Box 93, Ottawa, Ont	Can
Bausch & Lomb, Inc.	80000 Bausch St. Rochester 2	NY
Century Electronics & Instruments, Inc.	1300 N Dixie, Tulsa 10	Okla
Cook Electric Co. Cook Tech Ctr.	6601 W Oakton St. Morton Grove	Ill
Electricite Mon Sta d'	11 rue Petit, Chilly Seine	Fr
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.		
Adv Pg 202	Box 608, San Diego 12	Cal
Hacker & Co. Inc., William J.	Box 666, West Caldwell	NJ
HUGHES AIRCRAFT CO. NUCLEONICS LAB.		
Adv Pg 203	Box 2097, Fullerton	Cal
Instron Engineering Corp.	2500 Washington St. Canton	Mass
Isotopes Specialties Co.	Box 608, Burbank	Cal
Mosesen Laboratories, Inc.	375 Fairfield Ave. Stamford	Conn
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),		
Adv. Pgs. 217, 219, 221	1000 Vermo St. Apollo	Pa
Pneumatic Ltd.	56 Princess St, Hanover Sq. London W1	Eng
Pye, Ltd	St. Andrews Rd, Cambridge	Eng
Reeves Testing Machine Div. Assoc Mach & Metals Inc.	East Moline	Ill
ROYAL RESEARCH CORP. Adv Pg 21	11024 Dublin Blvd. Hayward	Cal
Steer Testing Lab. Inc	2527 Knowlton St, Bridgeport 8	Conn
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 112-C	240 W 17th St. New York 11	NY
TOKYO SHIBAURA ELECTRIC CO. LTD.		
Adv Pg 225	12 Tsunko-cho 1-Chome, Chiyoda-ku, Tokyo	Jap
United Mfg. Div. W. L. Maxson Corp.	43 Haig St. Hamden 14	Conn

TESTING—ENVIRONMENTAL

See SERV. & CONS'LT: TESTING, ENVIRONMENTAL

TESTING—NONDESTRUCTIVE

See SERV. & CONS'LT: TESTING, NONDESTRUCTIVE
TEST EQUIPMENT—NONDESTRUCTIVE

TEST LOOPS

See LOOPS—TEST

TESTING—POSTIRRADIATION

See SERV. & CONS'LT: TESTING, POSTIRRADIATION

TETRAFLUOROETHYLENE RODS, SHEETS, TUBES

See Also PIPE & TUBING
PLASTICS

ALLIED ENGINEERING & PRODUCTION CORP.,		
Adv Pg 243	2437 Bleeding Ave. Minneap	Cal
Allied Plastics Supply Corp.	75 Cliff St. New York 38	NY
Auburn Mfg. Co.	840 Stack St, Middletown	Conn
Brothers Radio Co. Inc.	145 Hudson St. New York 13	NY
Chicago Gasket Co.	1871 W North Ave. Chicago 22	Ill
Garlock Electronic Products	Camden 1	NJ
Johns-Manville	22 E 40th St. New York 16	NY
Penn Fibre & Specialty Co.	2000 E Westmoreland St. Philadelphia 34	Pa
Polymer Corp.	2230 Fairmont Ave. Reading	Pa
Polypenco Ltd.	Tennis Rd. Welwyn Garden City, Herts	Eng
Raybestos-Manhattan, Inc.	Arnold & Stiegel Sts, Manheim	Pa
Resinoflex Corp.	Woodland Rd, Rowland	NJ
Shamban & Co., W. S.	11617 W Jefferson Blvd, Culver City	Cal
Soc. Des Resines Plastiques	81 rue Jean Goujon, Paris 8	Fr
Sparta Mfg Co Div U.S. Ceramic Tile Co	Dover	Ohio

THERMIONIC MATERIALS

BARNCHES & WILCOX CO.		
Adv. Pgs. 36, 38	161 E 42 St. New York 17	NY
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.		
Adv Pg 202	Box 608, San Diego 12	Cal
Mackey, Inc. A. D.	180 Broadway, New York 38	NY
Marquardt Corp	16666 Saticoy St. Van Nuys	Cal
Semi-Elements Inc.	Saxonburg Blvd. Saxonburg	Pa

THERMISTORS

Atkins Technical, Inc.	1276 W 3 St, Cleveland 13	Ohio
Barnes Engineering Co.	30 Commerce Rd. Stamford	Conn
Carborundum Co. Refractories Div.	Perth Amboy	NJ
D.I.S.I. Bunker Corp.	Via A. Bonfoni 30, Milan	Ital
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
Honeywell Controls, Ltd.	Vanderhoof Ave. Toronto, Ont Canada	
Keystone Carbon Co. Thermistor Div.	St. Marys	Pa
Kidde & Co. Inc., Walter	277 Main St. Belleville 9	NJ
Murata Seisakusho, Ltd.	1, Tomoumizu-machi, Hanaoka, Higashiyama-ku Yamashina, Kyoto	Jap
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 187	Eindhoven	Neth
Standard Tel. & Cables Ltd.	50 Glasshouse St. London EC 1	Eng
Texas Instruments Incorporated, Components Div.	Box 5012, Dallas 22	Tex
Victory Engineering Corp.	Springfield Ave. Springfield	NJ
Yellow Springs Instrument Co. Inc.	Box 186, Yellow Springs	Ohio

THERMOCOUPLES

AEG, Adv Pg 115-A	Hauptstuer, Frankfurt/Main, Germany	
ADVANCED PRODUCTS CO., Adv Pg 224	39 Broadway, North Haven	Conn
Advanced Technology Labs.	360 Whisman Rd. Mountain View	Cal
Aero Research Instrument Co. Inc.	315 N Aberdeen St. Chicago 7	Ill
American Thermo Electric Co.	1023 N Fuller Ave. Los Angeles 46	Cal
AMPEREX ELECTRONIC CORP.,		
Adv Pg 65	230 Duffy Ave. Hicksville	NY
Atkins Technical, Inc.	1276 W 3 St. Cleveland 13	Ohio
BAILEY METER CO. Adv Pg 69	20801 Euclid Ave. Wickliffe	Ohio
Bailey Meter Co. Ltd.	2010 St. Catherine St. W. Montreal, Que	Can
Barber Sales Co.	320 S Broad Ave. Ridgefield	NJ
Brass Metallurgical-Chemical Co.	600 65th Ave. Philadelphia 38	Pa
Bristol Co.	Box 1790 MRG, Waterbury 90	Conn
Cambridge Instrument Co., Ltd.	13 Grosvenor Pl. London SW1, Eng	
Continental Sensing, Inc.	1966 N Ruby St. Melrose Park	Ill
Cox & Co. Inc.	116 E 22nd St. New York 10	NY
CRAWFORD FITTING CO. Adv Pg 23	884 E 140 St. Cleveland 10	Ohio
Degussa	Box 3003 Frankfurt/Main	Ger
Denver Fire Clay Co.	Box 5555, Denver 17	Colo
Eckardt AG, J. C.	Pragar. 75/III, Stuttgart-Bad Cannstatt	Ger
Electrolite Motors Co. Ltd.	Abbey Rd. Park Royal, NW 10, London	Eng
Engelhard Industries, Inc.	113 Astor St. Newark 5	NJ
Epic, Inc.	150 Nassau St. New York 38	NY
Foster Instrument Co. Ltd.	Leominster, Herts, England	
FURBORO CO. Adv Pg 189	36 Magnolia Ave. Faulkner	Mass
General Controls Co.	801 Allen Ave. Glendale 1	Cal
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
Gordon Co., Claud S.	410 W 20 St. Chicago 16	Ill
HAGAN CHEMICALS & CONTROLS, INC.		
Adv Pg 28	Box 1346, Pittsburgh 30	Pa
Hasco Laboratories, Inc.	77 Olive St. New Haven	Conn
Honeywell Controls, Ltd.	Vanderhoof Ave. Toronto, Ont Canada	
Leeds & Northrup Co.	4901 Stenton Ave. Phila 44	Pa
Leeds & Northrup Ltd.	Broad St. Birmingham 19	Eng
Litton Industries	336 N Foothill Rd. Beverly Hills	Cal
MARTIN CO. NUCLEAR DIV. Adv Pg 5	Baltimore 3	Md
MINN-HONEYWELL REG CO. INDL. PRODS GROUP,		
Adv. Pgs. 138, 249	Wayne & Windrim Aves. Phila. 44	Pa
Nugent & Zumbra (Canada) Ltd	4 Bentwell Rd. Toronto 14	Ont
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 187	Eindhoven	Neth
PHYSICAL SCIENCES CORP. Adv Pg 26	307 N Fair Oaks Ave. Pasadena	Cal
Pneum & Kline Tube Co., Inc.	Whitehall & Tyndip, Linc Northtown	Pa
PYRO-ELECTRIC, INC. Adv Pg 7	Boston Rd. Hollsville	Ind
Pyrometer Instrument Co. Inc.	92 Portland Ave. Bergenfield	NJ
Siemens & Halske AG	Hauptverwaltung, 80, Karlsruhe, Germany	
Sodern S. A.	10 rue de la Pomme-Ble, Aubervilliers, Seine	Fr
THERMO ELECTRIC CO. INC.		
Adv Pg 208	Saddle Brook	NJ
Thermocouple Products Inc.	701 N Iowa St. Villa Park	Ill
Trinity Equipment Corp.	Box 1170, Cortland	NY
Ulmer Co., H. W.	2941 San Luis Rey Rd. Oceanside	Cal

THERMOELECTRIC MATERIALS

AEG, Adv Pg 115-A	Hauptstuer, Frankfurt/Main, Germany	
Advanced Technology Labs.	360 Whisman Rd. Mountain View	Cal
Alloys Research & Mfg. Corp.	34-32 57th St. Woodside 77	NY
AMERICAN SMELTING & REFINING CO., Adv Pg 67	120 Broadway, New York 5	NY
AMPEREX ELECTRONIC CORP.,		
Adv Pg 65	230 Duffy Ave. Hicksville	NY
Carborundum Co. Refractories Div.	Perth Amboy	NJ
Degussa	Box 3003 Frankfurt/Main	Ger
GENERAL ATOMIC DIV. GEN. DYNAMICS CORP.		
Adv Pg 202	Box 608, San Diego 12	Cal
General Thermoelectric Corp.	Princeton	NJ
Mackey, Inc. A. D.	180 Broadway, New York 38	NY
MARTIN CO. NUCLEAR DIV. Adv Pg 5	Baltimore 3	Md
METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INC.		
Adv Pg 2	Box 936, Attleboro	Mass
NUCLEAR ENTERPRISES LTD.,		
Adv Pg 194	180 Bovy St. Winnipeg 21	Man
Nucleic Metals, Inc.	Box 222 Concord	Mass
ROYAL RESEARCH CORP. Adv Pg 21	11024 Dublin Blvd. Hayward	Cal
Sonic Elements Inc.	Saxonburg Blvd. Saxonburg	Pa
Telecomputing Corp.	6155 Aero Dr. San Diego 11	Cal
UNITED NUCLEAR CORP., Adv Pg 26	365 Winchester Ave. New Haven 4	Conn

THERMOMETERS—BIMETALLIC

A. E. L. Ltd. Instrumentation Div.	Crown House, Aldwych, London WC2	Eng
Abbeon Supply Co.	179-15 Jamaica Ave. Jamaica 32	NY
American Instrument Co. Inc.	8030 Georgia Ave. Silver Spring	Md
American-Standard Controls Div.	8000 Trumbull, Detroit 6	Mich
Electrolite Motors Co. Ltd.	Abbey Rd. Park Royal, NW10, London	Eng
Gordon Co., Claud S.	410 W 20 St. Chicago 16	Ill
Marsh Instrument Co. Div. Cole Oil & Gas Corp.	3501 Howard St. Skokie	Ill
Nuenberg Thermometer Co. Inc.	156 Livingston St. Brooklyn 1	NY
Pacific Transducer Corp.	11088 SW Pico Blvd. Los Angeles 64	Cal
Partlow Corp.	Dept. HBG-68 New Hartford	NY
Science Associates, Inc.	194 Nassau St. W. Princeton	NJ
Taylor Instrument Cos.	95 Ames St. Rochester 1	NY
Weksler Instruments Corp.	156 E Merrick Rd. Freeport	NY
Zeal Ltd., G. H.	Lombard Rd. Morden Rd. Merton, London SW19	Eng

THERMOMETERS—RESISTANCE

AEG, Adv Pg 115-A	Hauptstuer, Frankfurt/Main, Germany	
A. E. L. Ltd. Instrumentation Div.	Crown House, Aldwych, London WC2	Eng
Assemac Industries Inc. Control Equip. Div.	Comly Ave. Greenwich	Conn
Atkins Technical, Inc.	1276 W 3 St, Cleveland 13	Ohio
BAILEY METER CO. Adv Pg 69	20801 Euclid Ave. Wickliffe	Ohio

Bailey Meter Co. Ltd.	6010 St. Catherine St. W, Montreal, Que Can	
Bendix Corp-Bendix Pacific Div.	11600 Sherman Way, N Hollywood	Cal
Bristol Co.	Box 1790 NBG, Waterbury 20	Conn
Cambridge Instrument Co., Ltd.	13 Grosvenor Pl, London SW1, Eng	
Cox & Co, Inc.	115 E 23rd St, New York 10	NY
Degussa	Box 2003 Frankfurt/Main	Ger
Eckardt AG, J. C.	Pragier, 72/III, Stuttgart-bad Cannstatt	Ger
Edison Inst., Thomas A., Inst. Div. McGraw-Edison Co.	40 Lakeside Ave, West Orange	NJ
Engelhard Industries, Inc.	113 Astor St, Newark 2	NJ
Fielden Electronics Ltd.	Paxton Rd, Wythenshawe, Man 22, Eng	
Foster Instrument Co, Ltd.	Letchworth, Herts, England	
FOXBORO CO. Adv Pg 180	38 Neponset Ave, Foxboro	Mass
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
HAGAN CHEMICALS & CONTROLS, INC. Adv Pg 20	Box 1346, Pittsburgh 30	Pa
Kahl Scientific Instrument Corp.	Box 1108, El Cajon	Cal
Kaiser & Co. Inc.	Box 816, Hartford 1	Conn
Leeds & Northrup Co.	4936 Stenton Ave, Phila 44	Pa
Minco Products, Inc.	740 Washington Ave, N, Minneapolis 1	Minn
MINN-HONEYWELL REG CO. INDL PRODS GROUP, Adv. Pgs. 126, 240	Wayne & Windsin Aves. Phila. 44	Pa
Negretti & Zambra (Canada) Ltd	4 Bertcelli Rd. Toronto 14	Ont
Rosemount Engineering Co.	4900 W 70 St, Minneapolis, 24	Minn
Siemens Americans, Inc.	194 Nassau St, W, Princeton	NJ
Siemens & Halske AG	Rheinbrueckenstr, 50, Karlsruhe, Germany	
TOKYO SHIBAURA ELECTRIC CO. LTD. Adv Pg 229	12 Yurakucho 1-Chome, Chiyoda-ku, Tokyo	Jap
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. SECT. Adv. Pgs. 70, 71	Pittsburgh	Pa
Yellow Springs Instrument Co, Inc.	Box 106, Yellow Springs	Ohio

THERMONUCLEAR EQUIPMENT

AEG, Adv Pg 112-A	Hochstrasse, Frankfurt/Main, Germany	
Atomic Labs Sub, Cenco	3606 Claremont Ave, Berkeley 5	Cal
GENERAL ATOMIC DIV, GEN. DYNAMICS CORP. Adv Pg 202	Box 608, San Diego 12	Cal
Quantedyne	Box 353, Woodland Hills	Cal
Trinity Equipment Corp.	Box 1172, Cortland	NY
UNITED NUCLEAR CORP., Adv Pg 36	365 Winchester Ave. New Haven 4	Conn

THERMONUCLEAR TECHNOLOGY

See SERV. & CONS'LT: THERMONUCLEAR TECHNOLOGY

THERMOSTATS

See Also CONTROLS—TEMPERATURE

Bailey Instrument Co. Inc.	16 River St. Chatham	NJ
Cambridge Instrument Co., Ltd.	13 Grosvenor Pl, London SW1, Eng	
Edison Inst., Thomas A., Inst. Div. McGraw-Edison Co.	40 Lakeside Ave, West Orange	NJ
Fielden Electronics Ltd.	Paxton Rd, Wythenshawe, Man 22, Eng	
General Controls Co.	801 Allen Ave, Glendale 1	Cal
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
H-B Instrument Co.	American & Bristol Sts, Philadelphia 40	Pa
Honeywell Controls, Ltd.	Vanderhoof Ave, Toronto, Ont Canada	
Johnson Service Co.	Milwaukee 1	Wis
MINN-HONEYWELL REG CO. INDL PRODS GROUP, Adv. Pgs. 126, 240	Wayne & Windsin Aves. Phila. 44	Pa
Modern Lab. Equipment Co., Inc.	188 In Ave, New York 59	NY
Nutting Thermometer Co. Inc.	154 Livingston St. Brooklyn 1	NY
Partlow Corp.	Dept, NRG-58 New Hartford	NY
Process Control Gear Ltd.	Lustmore Rd. St. Albans, Herts, England	
Spencer Mfg. Co. Inc.	PO Annex 1007, Mansfield	Ohio
Ulanet Co. George	413 Market St. Newark 5	NJ
Wingard Co., Edwin L.	7600 Thomas Blvd, Pittsburgh 5	Pa
Will Corp.	Box 1086, Rochester 3	NY
Yellow Springs Instrument Co, Inc.	Box 106, Yellow Springs	Ohio

THICKNESS GAGES

See GAGES—THICKNESS OR DENSITY, NONRADIOACTIVITY
GAGES—THICKNESS OR DENSITY, RADIOACTIVITY

THORIUM

See FUELS—REACTOR
METALS, ALLOYS & COMPOUNDS: THORIUM
SERV. & CONS'LT: THORIUM, CONVERSION

TIMERS

See Also CONTROLS—TIMING

American Time Products Div. Bulova Watch Co. Inc.	61-20 Woodside Ave, Woodside 77	NY
Assmann-Berman Corp	111 W Jewel Ave, St. Louis 22	Mo
Automation, Inc. Div, C. W. Reed Co Inc	1000 S Hoover, L A 46	Cal
ATOMIC ACCESSORIES, INC., Adv Pg 206	811 W Merrick Rd. Valley Stream	NY
B & K Labs. Ltd.	4 Tilney St, Park Ln, London W1	Eng
Baldwin Industrial Controls	Dartford, Kent	Eng
Bendix Corp-Bendix Pacific Div.	11600 Sherman Way, N Hollywood	Cal
Bendix Ericson U.K. Ltd.	High Church St, New Basford, Nott.	Eng
Berwick Associates, Inc	138 E 53rd St, New York 22	NY
Bowmar Instrument Corp.	8000 Bluffton Rd, Fort Wayne	Ind
Bryans Aeroquipment Ltd.	Willow Ln. Mitcham, Surrey	Eng
Canadian Applied Research Div. A.V. Roe Can. Ltd.	Box 6004, Tomt. A, Toronto	Ont
Computer Equipment Corp.	11513 Olympic Blvd, Los Angeles 66	Cal
Cutler-Hammer, Inc.	432 N 12th St, Milwaukee 1	Wis
D.I.S.I. Nuclear Corp.	Via A. Bordoni 30, Milan	Ital
Designers for Industry, Inc.	4041 Fulton Pkwy, Cleveland 9	Ohio
Dr. Vinn KG	99 Rosenburgweg, Bonn	Ger
Electricite Mon Sin d'	11 rue Petit, Clichy Seine	Fr
Erie Pacific Div. Erie Resistor	12933 S Weber Way, Hawthorne	Cal
General Controls Co.	801 Allen Ave, Glendale 1	Cal
GENERAL ELECTRIC CO. APPARATUS SALES, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
HAMMER ELECTRONICS CO. Adv Pg 212	Box 591, Princeton	NJ
Hayden Co., A. W.	316 N Elm St, Waterbury	Conn
Industrial Timer Corp.	1407 McCarter Hwy, Newark 4	NJ
ISOTOPE DEVELOPMENTS LTD. Adv Pg 74	Bath Rd. Beaconsfield, Reading, Berks	Eng
Kobe Kogyo Corp.	1-5 Wakayama-Dori, Hyogo-ku, Kobe	Jap
LAND-AIR INC. SUB. STRALECTRON INC. Adv Pg 204	7400 W Wilson Ave. Chicago 31	Ill
Leach Corp.	18436 Susana Rd, Compton	Cal
L'Electronique Appliquee	55 rue de Docteur Finlay, Paris 15	Fr
LIEBEL-FLARSHEIM CO. DIV. RITTER CO. INC. Adv Pg 187	400 West Ave. Rochester	NY
Lockheed Aircraft Corp.	Box 551, Burbank	Cal
Miles Hivolt Ltd	Old Shoreham Rd, Shoreham-by-Sea, Sussex	Eng
Norman Laboratories, Inc	Williams Bay	Wis
NUCLEAR-CHICAGO CORP., Adv. Pgs. 54-57	340 E Howard Ave. Des Plaines	Ill
Nuclear Enterprises (GB) Ltd.	Sighthill, Edinburgh 11	Scot
NUCLEONIC CORP. OF AMERICA, Adv Pg 282	196 Dupont St. Brooklyn 31	NY
Pulsar Equipment, Ltd.	Pollerdbridge Rd, Ex, Redhill, Surr, Eng	
Partlow Corp.	Dept, NRG-58 New Hartford	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. Adv Pg 187	Eindhoven	Neth
Poetschke & co. oHG	Box 2708, Frankfurt/Main 1	Ger
Presin Co. Inc.	5014 Broadway, Santa Monica	Cal
Racal Instruments Ltd.	Western Rd, Bracknell, Berks, England	
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	665 Merrick Rd. Lynbrook	NY
RADIATION INSTRUMENT DEVELOPMENT LAB. Adv. Pgs. 214, 230d-D	67 E North Ave. Northlake	Ill
Robinson & Co. Ltd., D.	5 & 7 Church Rd, Richmond, Surrey	Eng
SHARP LABORATORIES, INC. Adv Pg 86	Box 1302, La Jolla	Cal
Siemens-Reiniger-Werke AG,	Luitpoldstr. 46, Erlangen, Germany	
TECHNICAL ASSOCIATES, Adv Pg 230	140 W Providencia Ave. Burbank	Cal
Technology Instrument Corp	631 Main St, Acton	Mass
TOKYO SHIBAURA ELECTRIC CO. LTD. Adv Pg 229	12 Yurakucho 1-Chome, Chiyoda-ku, Tokyo	Jap
TRACERLAB, INC. Adv. Pgs. 134, 113-5	1601 Trapelo Rd. Waltham 54	Mass
Trent Electronics, Inc.	432 South St, Rochester 8	NY
Ulmer Co., H. W.	2941 San Luis Rey Rd. Oceanside	Cal
WESTERN INSTRUMENT CO. Adv. Pg. 4th Cover	3800-11 Waugh Ave. Cleveland 3	Ohio
Walton Co.	10821 S La Cienega Blvd. LA 45	Cal
Wallham Precision Instrument Co.	221 Crescent St, Waltham 54	Mass
Wolverine Co.	13800 W 8 Mile Rd. Southfield	Mich
Wilson & Co., G. C.	1005 10th St, Huntington	W Va

TISSUE-EQUIVALENT MATERIALS

Alderson Research Laboratories, Inc.	40-14 33rd St, Long Island City 1	NY
D.I.S.I. Nuclear Corp.	Via A. Bordoni 30, Milan	Ital
Kobe Kogyo Corp.	1-5 Wakayama-Dori, Hyogo-ku, Kobe	Jap
REACTOR EXPERIMENTS, INC. Adv Pg 26	140 Nuclear Blvd. Belmont	Cal

TITANIUM

See METALS, ALLOYS & COMPOUNDS

TONGS—HANDLING

ALLIED ENGINEERING & PRODUCTION CORP., Adv Pg 242	3621 Blending Ave. Alameda	Cal
AMERAY CORP., Adv Pg 113	Route 46, Kenvil	NJ
Atlas Titanium, Ltd.	Centre St, Welland, Ont.	Can
ASSMANN-BERMAN Corp	111 W Jewel Ave, St. Louis 22	Mo
Carter & Viner	Camden Sou Rd, Redhill, Surrey, Eng	
CENTRAL RESEARCH LABORATORIES, INC. Adv. Pgs. 28, 29	Red Wing	Minn
D.I.S.I. Nuclear Corp.	Via A. Bordoni 30, Milan	Ital
Evans & Son (Portsmouth) Ltd., L. Marcyn Wks,	Gladstone Ave, Portsmouth, Hants, Eng	
Gazette Industrie	52 Rue de Dunkerque, Paris 9	Fr
Isotopes Specialties Co.	Box 686, Burbank	Cal
Kobe Kogyo Corp.	1-5 Wakayama-Dori, Hyogo-ku, Kobe	Jap
Nuclear Consultants Corp.	5948 Manchester Rd, St. Louis 10	Mo
Nuclear Research Applications Ltd.	Bell St, Reigate, Surrey, England	
NUCLEONIC CORP. OF AMERICA, Adv Pg 282	196 Dupont St. Brooklyn 31	NY
Picker X-Ray Corporation	2270 Mamaroneck Ave, White Plains	NY
RADIATION EQUIP. & ACCESSORIES CORP. Adv. Pg. 3rd Cover	665 Merrick Rd. Lynbrook	NY
Radiation Products, Inc.	71, 40 Rd, Flushing 55	NY
RADION CHEMICAL CO. INC. Adv Pg 12	151 E 42nd St. New York 17	NY
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229	23 Rd G. Clemenceau, Courbevoie, Seine	Fr
U. S. NUCLEAR CORP., Adv Pg 127	801 N Lake St. Box 2002, Burbank	Cal

TRAFFIC & TRANSPORTATION

See SERV. & CONS'LT: TRAFFIC & TRANSPORTATION

TRAINING—NUCLEAR

See SERV. & CONS'LT: TRAINING, NUCLEAR

TRANSDUCERS

1. FLOW
2. PRESSURE
3. TEMPERATURE

AEG, 1-2-3, Adv Pg 113-A	Hochstrasse, Frankfurt/Main, Germany	
Advanced Technology Labs. 3	849 Whisman Rd. Mountain View	Cal
Aerosol Industries Inc. Control Equip. Div. 1-2-3	Comly Ave. Greenwich	Conn
American-Standard Controls Div. 3	6900 Trumbull, Detroit 8	Mich
Appleby & Ireland, Ltd., 1-2	Mark Lane, Basingstoke, Hants	Eng
Armstrong Whitworth Equipment, 3	Hucclecote, Gloucester	Eng
Atkins Technical, Inc. 3	1270 W 3 St, Cleveland 13	Ohio
Atlantic Research Corp. 3	Alexandria	Va
AVRIN, INC. 2-3, Adv Pg 184	25-15 Northern Blvd. Woodside 77	NY
B-I-F Industries, Div. NY Air Brake Co. 1-2-3	230-D Harris Ave, Providence 1	RI
BLH Corp. Electronics & Inst Div. 1-2-3	42 4th Ave. Waltham 54	Mass
BAILEY METER CO. 1-2-3, Adv Pg 69	29801 Euclid Ave. Wickliffe	Ohio
Baldwin-Lima-Hamilton Corp. 1-2-3	Philadelphia 42	Pa
Barnes Instrument Corp. 1	180 Monterey Pass Rd, Monterey Park	Cal
Beckman & Whitley, Inc. 2	903 E San Carlos Ave. San Carlos	Cal
Bendix Corp. Montrose Div. 2-3	South Montrose	Pa
Bendix Corp. Pioneer-Central Div. 1	Davenport	Iowa
Berg-Warner Controls Div. Berg-Warner Corp. 3	2800 Newport Blvd. Santa Ana	Cal
Bourns, Inc. Instrument Div. 2	6135 Magnolia Ave. Riverside	Cal
Bristol Co. 1-2-3	Box 1790 NBG, Waterbury 20	Conn
Cambridge Instrument Co., Ltd. 2-3	13 Grosvenor Pl, London SW1, Eng	
Chesapeake Instrument Corp. 2	Shadyside	Md
Computer Instruments Corp. 2	92 Madison Ave. Hempstead	NY
Consolidated Controls Corp. 1-2-3	34 Decatur Ave. Bethel	Conn
Consolidated Controls Corp. 1-2-3	3422 San Mateo, NW, Albuquerque	NM
Consolidated Electrodynamics Corp. 3	360 Sierra Madre Villa, Pasadena	Cal
Cox & Co, Inc. 3	115 E 23rd St, New York 10	NY
Dietz Co. Inc., Henry G. 1-2	38-18 Astoria Blvd, Long Island City 5	NY
Dynisco Div. Amer. Brake Shoe Co. 2	42 Cambridge St, Cambridge 42	Mass
Eckardt AG, J. C. 1-2-3	Pragier, 72/III, Stuttgart-bad Cannstatt	Ger
EDGERTON, GERMESHAUSEN & GRIER, INC. 3, Adv Pg 188	160 Brookline Ave. Boston 13	Mass
Electro-Ceramics, Inc. 1-2	1845 S 2 W, Salt Lake City 15	Utah
Electro-Mechanical Research, Inc. 2	Box 3041, Sarasota	Fla
Electronic Processes Corp. 3	438 Bryant St, San Francisco	Cal
Erie Resistor Corp. 3	644 W 12th St, Erie	Pa
Evershed & Vignoles, Ltd. Acton Lane Wks. 1-2-3	Chiswick, London W4	Eng
Fairchild Controls Corp. 3	225 Park Ave, Hicksville	NY
Fielden Electronics Ltd. 3	Paxton Rd. Wythenshawe, Manchester 22, England	
Firth Cleveland Instruments Ltd. 1	Trefforest, Pontypridd, Glamorgan	Wls
Flow Corp. 1	11 Carleton St. Cambridge 42	Mass
FOXBORO CO. 1-2-3, Adv Pg 180	38 Neponset Ave. Foxboro	Mass
GENERAL ELECTRIC CO. APPARATUS SALES, 1-2, Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
HAGAN CHEMICALS & CONTROLS, INC. 1-2-3, Adv Pg 20	Box 1346, Pittsburgh 30	Pa
Honeywell Controls, Ltd. 1-2-3	Vanderhoof Ave, Toronto, Ont Canada	
Johnson Service Co. 3	Milwaukee 1	Wis
Leeds & Northrup Co. 3	4936 Stenton Ave, Phila 44	Pa
Liquid Metals, Inc. 2	Box 2002, Wurtland	Mass
M. Ten Bosch, Inc., 2	80 Wheeler Ave, Pleasantville	NY
Milton, Inc. 3	9020 S W Macadam Ave, Portland 19	Ore
Minco Products, Inc. 3	740 Washington Ave, N, Minneapolis 1	Minn
MINN-HONEYWELL REG CO. INDL PRODS GROUP, 1-2-3, Adv. Pgs. 126, 240	Wayne & Windsin Aves. Phila. 44	Pa
National Instrument Labs. Inc. 1	940 Evans St, NE, Washington	DC
NERATOM, N. V., 1-2-3, Adv Pg 113-F	Noordende 38, The Hague	Neth
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. 1-2-3, Adv Pg 187	Eindhoven	Neth
Photocon Research Products, 3	421 N Altadena Dr. Pasadena	Cal
PHYSICAL SCIENCES CORP. 3, Adv Pg 26	209 N Fair Oaks Ave. Pasadena	Cal
Polyphase Instrument Co. 2	E 6th St, Bridgeport	Pa
Potter Aeronautical Corp. 1	Route 22E, Union	NJ
Powertron Ultrasonics Corp., 1	Bayway, Ind. Pk. Plainview	NY
Republic Flow Meter Co. 1-2-3	5200 Diversey Pkwy, Chicago 47	Ill
Schlumberger-Fulton Controls Co. Instrument & Instrument Div. 1-2-3	401 N Manchester, Anaheim	Cal
Statham Engineering Co. 2-3	4300 W 70 St, Minneapolis, 24	Minn
Sorbron Co. 2	175 Wyman St, Waltham 54	Mass

Servomechanisms Inc. 2-3	250 Aviation Blvd. El Segundo	Cal
Siemens & Halske AG, 1-2-3	Electromechanic, 50, Karlsruhe	Ger
Sylvania Electronic Group Ltd. 2-3	Victoria Rd. Farnborough, Hants	Eng
Southern Instruments, Ltd. 2	Priestley Rd. Cambridge, Surrey, England	
Sperlan Co., C. E. 1-2-3	18000 Syracuse Ave. Cleveland 10	Ohio
Taylor Instrument Cos. 1-2-3	50 Arden St. Rochester 1	NY
Trans-Sonics, Inc., 2-3	Box 555, Lexington 73	Mass
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. SECT. 1-2-3,		
Adv. Pgs. 70, 71	Pittsburgh	Pa

TRANSDUCERS—ULTRASONIC

Acoustica Associates Inc.	10400 Aviation Blvd. Los Angeles 45	Cal
Alcoa Instruments	611 Robbins Ave. Trenton 5	NJ
Apparecchi Scientifici Pedrini	Via Ripamo 5, Milan	Ital
Atlantic Research Corp.	Alexandria	Va
Bendix Corp. Pioneer-Central Div.	Davenport	Iowa
BRANSON INSTRUMENTS, INC. Adv Pg 79	37 Brown House Rd. Stamford	Conn
Curtiss-Wright Corp. Princeton Div.	Box 110, Princeton	NJ
Dynasonic Corp.	630 Massachusetts Ave. Cambridge 39	Mass
Electro-Ceramics, Inc.	1065 S 8 W, Salt Lake City 15	Utah
Electronic Assistance Corp.	30 Bridge Ave, Red Bank	NJ
Elkon Instruments Inc.	400 Buckley St, Bristol	Pa
Fath & Co. Ltd., M.	Dunsfoe House, Belgate, Surrey, Eng	
Kidde & Co. Inc., Walter	377 Main St. Belleville 9	NJ
L'Electronique Appliquee	55 rue de Dorteuil Pinlay, Paris 15, Fr	
Marconi-Decca Ltd.	44 Tower Hill, London, EC3	Eng
Mizuta Sokuhinhin, Ltd.	1, Tomomitsu-machi, Hiroshima, Higashiyama-ku Tomadana, Kyoto	Jap
National Ultrasonic Corp.	18 Park Ave. Hadley 10	NJ
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 107	Eindhoven	Neth
Plastofell Co. Inc.	10 E 53 St, New York 16	NY
Powertron Ultrasonics Corp.	Dupont, Ind. Pk. Pleasantville	NY
Raytheon Amerlume, Prod.	100 Stevens Ave. Mt. Vernon	NY
TURCO PRODUCTS, INC. Adv Pg 139	Box 1985, Wilmington	Cal
ULTRASONIC INDUSTRIES, INC.		
Adv Pg 88	Assoc Co. Engr. 1955, Plainview	NY
Union Ultra-Sonics Corp.	111 Penn St. Quincy 69	Mass

TRANSFORMERS

1. CONSTANT-VOLTAGE
2. DIFFERENTIAL
3. POWER
4. PULSE
5. VARIABLE

AEG, 1-2-4, Adv Pg 112-A	Hochstrasse, Frankfurt/Main, Germany	
A. E. I. Ltd. 2-3-4	30 Grosvenor Pl, London SW1, England	
Acme Electric Corp. 1-2-5	31 Water St. Cuba	NY
ALLGEMEINES APP. CO. 2.		
Adv. Pgs. 109-111	933 S 70th St. Milwaukee	Wis
Alsthom, Nucleon Div. 2	38, Ave. Kleber, Paris 16, France	
AMP Inc. 1-2-4	Hamilton Blvd. Harrisburg	Pa
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, S.		
Adv Pg 112-D	Charleroi	Belg
Avelay Electric, Ltd. 1-2-3-4-5	5 Ockendon, Essex	Eng
AVION, INC. 2, Adv Pg 104	35-15 Northern Blvd. Woodside 77	NY
Axel Electronics, Inc. 4	154-20 Jamaica Ave. Jamaica 10	NY
Cambridge Thermionic Corp. 5	445 Concord Ave. Cambridge 38	Mass
Canadian Marconi Co., 2-4	2442 Trenton Ave. Montreal 16	Can
CARAD CORP. 1-2-4-5, Adv Pg 224	2207 Jackson Ave Blvd. Pale Alto	Cal
Central Transformer Co. 2-3-4	500 W Jackson Blvd, Chicago 7	Ill
Cutler-Hammer, Inc. 1	633 N 12th St, Milwaukee 1	Wis
D-H Research Labs. Inc. 4	149 Adeline St, Oakland 20	Cal
ESC Electronics Corp. 4	534 Bergen Blvd. Palisades Park	NJ
EDGERTON, GERMESHAUSEN & GRIER, INC. 2-4,		
Adv Pg 105	160 Brookline Ave. Boston 15	Mass
Elmar, Inc. 2	1235 W Broad St. Falls Church	Va
Electro Engineering Works, 3	401 Pineda St, San Leandro	Cal
Elco Resistor Corp. 4	644 W 12th St. Erie	Pa
Fenwell Instruments, Ltd. 5	Light Industrial Estate, York Rd. Wetherby	Eng
Fermont Electric, Inc., 3-4	Industrial Pk. 81, Plainview	NY
Finger & Ancliere de Cons. Electriques de Jeumont, 3	5 pl. Rio-de-Janeiro, Paris 8e	Fr
Foster Transformers Ltd, 1-2-3-5	5 Maplehedge Mayfair Rd, London, SW15	Eng
Frand Transformer Co. Inc. 1-2-5	1718 Pitkin St. Brooklyn 27	NY
Fuji Electric Mfg. Co. Ltd. 2	2-6 Marunouchi, Chiyoda-ku, Tokyo	Jap
General Controls Co. 5	801 Allen Ave. Glendale 1	Cal
GENERAL ELECTRIC CO. APPARATUS SALES, 1-4-5,		
Adv. Pgs. 71, 73	1 River Rd. Schenectady 5	NY
General Electric Co. Ltd. of England, 2	Erith, Kent, England	
General Radio Co. 5	West Concord	Mass
Grand Transformer, Inc.1-2-3	Morton & Beach Tree Sts. Grand Haven	Mich
Harvey Electronics Ltd. 3	370 Pembrough Rd. Pembroke, Hants	Eng
Hermetic Seal Transformer Co. 2-3.		
Hermar Ind. Inc. 2-3-4	600 N 4th St. Garland	Tex
Hitachi, Ltd. 1-5	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
KEPCO INC. 1, Adv Pg 68.	131-38 Sanford Ave. Flushing 52	NY
Keystone Products Co. 2-4	804-6 23rd St. Union City	NJ
Linear Industries, 1-2-3-4	206 N Foothill Rd, Beverly Hills	Cal
Magnetran, Inc. 3	240 Schuyler Ave, Kearny	NJ
Marconi's Wireless Telegraph Co. Ltd. 1	Chelmsford, Essex	Eng
Mike Hawke Ltd. 1-5	Old Shoreham Rd, Hove-by-Sea, Sussex	Eng
Mitchell Radiation Products Corp. 1	2 Washington St, Nanticoke	Pa
North Hills Electronics, Inc. 4	Alexander Pl, Glen Cove	NY
Oerlikon Engineering Co., 2-3-4-5	Zurich 50	Switz
Olmsbe Mfg. Co. 5	3001 Howard St, Skokie	Ill
PCA Electronics Inc. 4	10750 Schoenborn St, Sepulveda	Cal
Pennsylvania Transformer Div. McGraw-Edison, 2	Canonsburg	Pa
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. 2.		
Adv Pg 107	Eindhoven	Neth
Plessey Nucleonics Ltd. 4	Wooden Rd, Northampton, England	
Polyphase Instrument Co. 1-2-3-4	E 6th St. Bridgeport	Pa
Raytheon Co. Microwave & Power Tube Div. Spencer Laboratory, 1-2-3-4	Burlington	Mass
Sangamo Electric Co. 2-4	12 & Converse Sts. Springfield	Ill
Schelay Bros. Inc. 3	6801 W 67th St, Chicago 38	Ill
Servomechanisms, Inc. 1-2-3-4-5	250 N Aviation Blvd. El Segundo	Cal
Sickles Div. General Instrument Corp. 4-5	165 Front St, Chicopee	Mass
Sperry Gyroscope Co. Div. Sperry Rand Corp. 3	Great Neck	NY
Sprague Electric Co. 4	Marshall St, North Adams	Mass
Standard Winding Co. Div. Ordnance Corp. 1-2-4-5	44-02 Johnson St, Newburgh	NY
Sterling Transformer Corp. 2-4	610 Driggs Ave, Brooklyn 11	NY
Superior Electric Co., The, 5	380 Middle St, Bristol	Conn
Sylvania Elec Prods Inc. Special Prods Operation, 1-2-3-4-5	60 Boston St, Salem	Mass
TERMINAL RADIO INTERNATIONAL LTD. 1-2,		
Adv Pg 113-C	348 W 17th St. New York 11	NY
Torvico Electronics, Inc. 3	Box 70, Lakewood	NJ
Transformers, Inc. 1-2-3-4-5	200 Stage Rd. Vestal	NY
Tresco, Inc. 1-2-4-5	2054 Terrace St. Philadelphia 30	Pa
Ulmer Co., H. W. 3	2041 San Luis Rey Rd. Oceanside	Cal
Valor Instruments, Inc. 2-3-4	13134 Crenshaw Blvd. Gardena	Cal
Wagner Electric Co. 1-3	6400 Plymouth, St. Louis 30	Mo
Wheeler Electronic Corp. 1-2-3-4-5	150 E Aurora St, Waterbury 20	Conn
Zenith Electric Co. Ltd. 2-5	Willson Rd. London NW 9	Eng

TRANSISTORS

See Also DIODES—SEMICONDUCTOR

AEG, Adv Pg 112-A	Hochstrasse, Frankfurt/Main, Germany	
A. E. I. Ltd.	30 Grosvenor Pl, London SW1, England	
Acme Electric Corp.	31 Water St. Cuba	NY
Amplifier Corp. of America	398 Broadway, New York 13	NY
Bell Telephone Mfg. Co.	30 Berkenrode, Hoboken/Antwerp	Belg
Clevite Transistor	200 Smith St, Waltham 54	Mass
Crystalonics, Inc.	349 5th Ave. Cambridge 42	Mass
D. I. S. I. Nuclear Corp.	Via A. Bonfoni 36, Milan	Ital
Fairchild Semiconductor Corp.	545 Whisman Rd, Mountain View	Cal
Grand Transformer, Inc.	Morton & Beach Tree Sts. Grand Haven	Mich
Hitachi, Ltd.	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
Honeywell Controls, Ltd.	Vanderhoof Ave, Toronto, Ont Canada	
Hughes Semiconductor Div.	500 Superior Ave, Newport Beach	Cal
Motorola Semiconductor Products Inc.	5005 E McDowell Rd, Phoenix	Ariz
PCA Electronics Inc.	10750 Schoenborn St, Sepulveda	Cal
Pacific Semiconductors, Inc.	13966 Cimbron Ave. Hawthorne	Cal
PHILCO CORP. LANSDALE TUBE DIV.		
Adv Pg 193	Church Rd. Lansdale	Pa
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 107	Eindhoven	Neth
Polyphase Instrument Co.	E 4th St, Bridgeport	Pa
Radio Corp. of America Semiconductor & Materials Div.	Box 591, Somerville	NJ
Raytheon Co. Semiconductor Div.	150 California St, Newton 58	Mass
Servomechanisms, Inc.	250 N Aviation Blvd. El Segundo	Cal
Sickles Div. General Instrument Corp.	165 Front St. Chicopee	Mass
SPERRY SEMICONDUCTOR DIV. SPERRY RAND CORP.		
Adv Pg 232	300 Main St. Norwalk	Conn
Sprague Electric Co.	Marshall St, North Adams	Mass
Standard Tel. & Cables Ltd.	29 Glasshouse Td, London EC 1	Eng
Sylvania Elec Prods Inc. Semiconductor Div.	100 Sylvan Rd. Woburn	Mass
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 113-C	348 W 17th St. New York 11	NY
Texas Instruments Incorporated, Transistor Div.	Box 5012, Dallas 22	Tex
TRANSISTRON CORP. (CE. TRANCOR),		
Adv Pg 112-B	173 Blvd. Haussman, Paris 8	Fr
Transitron Electronic Corp.	168 Albany St, Wakefield	Mass
Valor Instruments, Inc.	13134 Crenshaw Blvd, Gardena	Cal

TRAPS

1. AIR
2. LIQUID-METAL
3. STEAM

A. E. I. Ltd. 1	30 Grosvenor Pl, London SW1, England	
Atomics International Div. NAA, 3	Box 309, Canoga Park	Cal
BABCOCK & WILCOX CO. 2.		
Adv. Pgs. 34, 35	161 E 42 St. New York 17	NY
Crane Co. Ind. Prod Co. 2.	4300 S Kedzie Ave. Chicago 32	Ill
Demerson & Co., Ltd. 2	Great Dover St. London SE1, England	
Dunham-Bush, Inc. 2	170 South St. West Hartford 10	Conn
GENERAL ELECTRIC CO. APPARATUS SALES, 2.		
Adv. Pgs. 71, 73	1 River Rd. Schenectady 5	NY
Liquid Metals, Inc. 3	Box 2096, Wentford	Mass
MSA Research Corp. 2	Callery	Pa
Nash Engineers Co. Div. Cole Oil & Gas Corp. 2.	3001 Howard St. Skokie	Ill
Roy Co., Milton, 1	1300 E Mermaid Ln. Phila 18	Pa
Sarco Co. Inc., 1-2	635 Madison Ave. New York 22	NY
Scientific Glass Apparatus Co. Inc., 1	100 Lakewood Ten. Bloomfield	NJ
Societe Fives-Penhoet, 2	207 rue Saint-Honore, Paris 1, France	
Squires Co., C. E. 1-2	18000 Syracuse Ave, Cleveland 10	Ohio
Vacuum-Electronic Corp. 2	Terminal Dr. Plainview	NY
Yarnall-Waring Co. 2	100 E Mermaid Ln. Phila 18	Pa

TUBE FITTINGS

See PIPE FITTINGS

TUBES—ELECTRON

See Also DIGITAL INDICATING DEVICES
GEIGER-MULLER TUBES
PHOTOMULTIPLIER TUBES
SCALING TUBES—DECADE

1. BEAM-SWITCHING
2. CATHODE-RAY
3. COLD-CATHODE, SPECIAL-PURPOSE
4. ELECTROMETER
5. IGNITRON
6. MICROWAVE
7. PHOTOMULTIPLIER
8. POWER
9. RECEIVING
10. RECTIFYING
11. THYRATRON
12. VOLTAGE-REGULATING
13. X-RAY

AEG, 2-3-11-13, Adv Pg 112-A	Hochstrasse, Frankfurt/Main, Germany	
A. E. I. Ltd. 2-3-5-7-8-9-11-12,	30 Grosvenor Pl, London SW1, England	
American Radio Co. Inc. 6-8	466 Park Ave. New York 22	NY
AMPEREX ELECTRONIC CORP. 1-2-3-4-5-6-7-8-9-10-11-12-13,		
Adv Pg 65	230 Duffy Ave. Hicksville	NY
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, S.		
Adv Pg 112-D	Charleroi	Belg
Avelay Electric, Ltd. 8-9	5 Ockendon, Essex	Eng
BAIRD-ATOMIC INC. 1-2-8-12,		
Adv Pg 87	33 University Rd. Cambridge 38	Mass
Barber Colman Co. 9	200 S Broad Ave. Ridgefield	NJ
Bendix Corp. Red Bank Div. Electron Tube Prods. 2-8-9-10-11-12,	Lincoln	NJ
Bomac Labs. Inc. 6	Hamilton Rd. Beverly	Mass
Burroughs Corp. Electronic Components Div. 1-6	Box 1226, Plainfield	NJ
C B S LABORATORIES, 7, Adv Pg 28	High Ridge Rd. Stamford	Conn
Canadian Marconi Co., 8-9	2442 Trenton Ave. Montreal 16	Can
Canadian Westinghouse Co. Ltd. 2-6-8-9-9-10-11-12-13	Box 510, Hamilton, Ontario, Canada	
Chase Brass & Copper Co. 6	236 Grand St. Waterbury	Conn
D. I. S. I. Nuclear Corp. 7	Via A. Bonfoni 36, Milan	Ital
DAMONT LABS., ALLEN B., DIV. FAIRCHILD CAMERA & INST CORP. 1-2-7		
Adv Pg 18	750 Bloomfield Ave. Clifton	NJ
Dell Electronics Ltd. 2-8-7	Hayes, Middlesex	Eng
DEL/OIL, 2-3-6-7-8, Adv Pg 49	1750 N Vine St. Hollywood 28	Cal
EDGERTON, GERMESHAUSEN & GRIER, INC. 2-3-10-11,		
Adv Pg 105	160 Brookline Ave. Boston 15	Mass
Electro-Mechanical Research, Inc. 7	Box 2041, Sarasota	Fla
Electrons, Inc. 10-11	127 Foster Ave. Newark 2	NJ
Feinbarb, Mann & Co. 7	100 Electra Ln. Yonkers	NY
Fermont Electric, Inc. 2-10	Industrial Pk. 81, Plainview	NY
Geiger Laboratories, 8	Box 3021, Woodland Hills	Cal
General Electric Co. Receiving Tube Div. 1-2-3-5-7-8-9-10-12-13	Owensboro	Ky
General Electrodynamics Corp. 8	4400 Forest Ln. Garland	Tex
HARMER ELECTRONICS CO. 7.		
Adv Pg 212	Box 221, Princeton	NJ
Hitachi, Ltd. 8-13	1-4-chome Marunouchi, Chiyoda-ku, Tokyo	Jap
Horton-Angel Co. 8	219 Beach St. Attleboro	Mass
Huggins Laboratories, Inc. 8	600 E Arques Ave. Sunnyvale	Cal
ITT LABS. COMPONENTS DIV. 5-7.		
Adv Pg 207	3700 E Pontiac St. Fort Wayne	Ind
KAMAN NUCLEAR, 2, Adv. Pgs. 190, 191	Garden of the Gods Rd. Colo Springs	Colo
KEARFOTT DIV. GEN. PRECISION, INC.		
Adv Pg 221	1150 McBride Ave. Little Falls	NJ
Kip Electronics, 2-10-11	1 Research Dr. Stamford	Conn
LANSDVERK ELECTRONETER CO. 4	645 Sunset Ave. Glendale 1	Cal
LIONEL ELECTRONIC LABS. 4-12,		
Adv Pg 210	1335 Flushing Ave. Brooklyn 37	NY
Linear Industries, 1-2-3-4	206 N Foothill Rd. Beverly Hills	Cal
Microwave Associates, Inc. 6	South Ave. Burlington	Mass
Mitchell Radiation Products Corp. 13	2 Washington St. Nanticoke	Pa
MORATORA, N. V., 2-3-4-5-6-7-8-9-10-11-12-13,		
Adv Pg 113-F	Hazelebeke 30, The Hague	Neth
NUCLEAR ENTERPRISES LTD. 1-2,		
Adv Pg 194	180 Bury St. Winnipeg 21	Man
Nuclear Research Associates, Inc. 6	38-16 Hunter Pl. Ave. LIC 1	NY
PHILCO CORP. LANSDALE TUBE DIV. 2		
Adv Pg 193	Church Rd. Lansdale	Pa
Phillips Electronic Instruments, 13	750 S Fulton Ave, Mt. Vernon	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V. 2-3-4-5-6-7-8-9-10-11-12-13,		
Adv Pg 107	Eindhoven	Neth
Poland Electronics Corp. 6	43-20 34th St, Long Island City 1	NY
RCA Victor Co Ltd. 1-2-3-5-6-7-8-9-10-11-13	1001 Lenoir St, Montreal 39	PQ

RADIATION EQUIP. & ACCESSORIES CORP. T.		
Adv. Pg. 3rd Cover	465 Hewlett Rd. Lynbrook	NY
RADIO CORP OF AMERICA, ELECTRON TUBE DIV. 2-3-7-8-9-10-11-12,		
Adv Pg 23	415 S 5th St. Harrison	NJ
Relin Corp. of America Industrial Electronic Prods. 13	Front & Cooper Sts, Camden 3	NJ
RADIOTECHNIQUE, LA, 7, Adv Pg 112-R	130 ave Ledru-Rollin, Paris 11e	Fr
Raytheon Co. Industrial Components Div. 1-2-3-4-5-9-10-11-13	55 Chapel St, Newton	Mass
Raytheon Co. Microwave & Power Tube Div. Spencer Laboratory, 8	Burlington	Mass
Siemens-Reiniger-Werke AG, 13	Lampenfabr. 46, Erlangen	Ger
Sperry Electronic Tube Div, Sperry Rand Corp. 9	Gainesville	Fla
Sperry Gyroscope Co, Div, Sperry Rand Corp. 9	Great Neck	NY
Standard Tel. & Cables Ltd, 2-3-5-7-8-9-10-11	19 Cleveland St, London W 1	Eng
Stewart Engineering Co. 6	487 Bean Creek Rd, Santa Cruz	Cal
Sylvania Elec Prods Inc. Electronic Tube Div. 2-3-6-7-8-9	Emporium	Pa
TECHNICAL ASSOCIATES, T, Adv Pg 235	140 W Providencia Ave. Burbank	Cal
TERAMAL RADIO INTERNATIONAL LTD. 2-4-7-8-9-10-11-12,		
Adv Pg 113-C	249 W 17th St. New York 11	NY
THOMSON-HOUSTON ECIE. FRANCAISE, 1-2-4-10-11,		
Adv Pg 112-D	173 Blvd. Haussman, Paris 8	Fr
TOKYO SHIBAURA ELECTRIC CO. LTD. 1-3-4-5-6-7-8-9-10-11-12-13,		
Adv Pg 225	12 Tsuruko-cho 1-Chome, Chiyoda-ku, Tokyo	Jap
20th Century Electronics Ltd, 9-T,	King Henry's Dr, New Addington Croydon, Surrey	Eng
Ultec Co., H, W, 1-3-8-10-11	2941 San Luis Rey Rd, Oceanside	Cal
Varian Associates, 6	611 Hansen Way, Palo Alto	Cal
WESTINGHOUSE ELECTRIC CORP. ELECTRONIC TUBE DIV. 2-3-4-6-7-8-9-10-11-12,		
Adv Pg 184	Box 284, Elmira	NY
X-Ray Dept. of General Electric Co. 9-10-13	4855 Electric Ave, Milwaukee	Wis

TUBING
See PIPE & TUBING

TURBINES—GAS

ABG, Adv Pg 112-A	Hochhaus, Frankfurt/Main, Germany	
A. E. I. Ltd.	33 Grosvenor Pl, London SW1, England	
Allison Div. Gen. Motors Corp.	Box 894, Indianapolis	Ind
Alsthom, Nuclear Div.	38, Ave. Kleber, Paris 16, France	
Brush Siddeley Engines, Ltd.	Knightsbridge, London S. W. 7	Eng
Canadian Westinghouse Co. Ltd.	Box 510, Hamilton, Ontario, Canada	
Escher Wyss Ltd.	Zurich, Switzerland	
Fuji Electric Mfg. Co. Ltd.	2-6 Marunouchi, Chiyoda-ku, Tokyo	Jap
Garrett Corp.	9851 Sepulveda Blvd, Los Angeles 45	Cal
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 12	1 River Rd, Schenectady 5	NY
Gesellschaftsbeim Siemens AG	Lipperfeld 1, Oberhausen Rhld	Ger
Northern Research & Eng. Corp.	230 Main St, Cambridge	Mass
Orenda Engines Ltd.	Box 4015 Term A, Toronto	Can
SOCIETE RATEAU, Adv Pg 113-T	Rue Rateau La Courneuve, Seine	Fr
Sulzer Bros. Ltd.	Winterthur	Switz
TOKYO SHIBAURA ELECTRIC CO. LTD.	12 Tsuruko-cho 1-Chome, Chiyoda-ku,	
Adv Pg 225	12 Tsuruko-cho 1-Chome, Chiyoda-ku,	
Tosi, S.p.A., Franco	Legnano, Milan	Ital
WESTINGHOUSE ELEC CORP. STEAM DIV.		
Adv. Pgs. 70, 71	Lima	Pa

TUNGSTEN
See METALS, ALLOYS & COMPOUNDS

TURBINES—STEAM

ABG, Adv Pg 112-A	Hochhaus, Frankfurt/Main, Germany	
A. E. I. Ltd.	33 Grosvenor Pl, London SW1, England	
ALLIS-CHALMERS MFG. CO.,		
Adv. Pgs. 109-111	933 S 70th St. Milwaukee 1	Wis
Alsthom, Nuclear Div.	38, Ave. Kleber, Paris 16, France	
Bethlehem Steel Corp.	701 E 3rd St, Bethlehem	Pa
Canadian Westinghouse Co. Ltd.	Box 510, Hamilton, Ontario, Canada	
De Laval Steam Turbine Co.	Trenton 2	NJ
Escher Wyss Ltd.	Zurich, Switzerland	
Fuji Electric Mfg. Co. Ltd.	2-6 Marunouchi, Chiyoda-ku, Tokyo	Jap
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 12	1 River Rd, Schenectady 5	NY
General Electric Co. Ltd. of England	Erith, Kent, England	
Gesellschaftsbeim Siemens AG	Lipperfeld 1, Oberhausen Rhld	Ger
Hitachi, Ltd.	2-6 Marunouchi, Chiyoda-ku, Tokyo	Jap
Ingersoll-Rand Co.	11 Broadway, New York 4	NY
MERATOM, N. V., Adv Pg 112-P	Noordeinde 30, The Hague	Neth
Northern Research & Eng. Corp.	230 Main St, Cambridge	Mass
Oerlikon Engineering Co.	Zurich 40, Switzerland	
SOCIETE RATEAU, Adv Pg 113-T	Rue Rateau La Courneuve, Seine	Fr
Sulzer Bros. Ltd.	Winterthur	Switz
TOKYO SHIBAURA ELECTRIC CO. LTD.	12 Tsuruko-cho 1-Chome, Chiyoda-ku,	
Adv Pg 225	Tokyo	Jap
Tosi, S.p.A., Franco	Legnano, Milan	Ital
WESTINGHOUSE ELEC CORP. STEAM DIV.		
Adv. Pgs. 70, 71	Lima	Pa
WORTHINGTON CORP.		
Adv. Pg. 3rd Cover	401 Worthington Ave. Harrison	NJ

ULTRASONIC EQUIPMENT
See Also TEST EQUIPMENT—NONDESTRUCTIVE
TRANSDUCERS—ULTRASONIC

Acoustica Associates Inc.	10400 Aviation Blvd, Los Angeles 45	Cal
Alcar Instruments	421 Hillside Ave, Tuscon 9	NJ
American Beach Aero Corp.	250 Fulton Ave. Hempstead	NY
American Sterilizer Co.	Box 620, Erie	Pa
American Time Products Div. Bulova Watch Co. Inc.	61-20 Woodside Ave, Woodside 77	NY
Apparecchi Scientifici Federici	Via Nizzoa 2, Milan	Ital
Arenberg Ultrasonic Lab, Inc.	94 Green St, Jamaica Plain 30	Mass
Assessment-Barnstine Corp	111 W Jewel Ave, St. Louis 22	Mo
ATOMIC ACCESSORIES, INC., Adv Pg 284	811 W Merrick Rd. Valley Stream	NY
Atomic Lab Sub. Conco	3000 Claremont Ave, Berkeley 5	Cal
Avelay Electric, Ltd.	S. Ockendon, Essex, England	
Bendix Corp. Pioneer-Central Div.	Davenport	Iowa
BRANSON INSTRUMENTS, INC. Adv Pg 78	37 Brown House Rd. Stamford	Conn
Cavitell Research & Electronics Ltd.	Scotts Rd, Southall, Middx.	Eng
Curtiss-Wright Corp. Princeton Div.	Box 110, Princeton	NJ
Dawe Instruments Ltd.	Western Ave. Acton, London W3	Eng
Designers for Industry, Inc.	4041 Fulton Pkwy, Cleveland 9	Ohio
Dixie Co., J. W.	Englewood 43	Ill
Electronic Assistance Corp.	99 Bridge Ave, Red Bank	NJ
Elico Instruments Inc.	430 Buckley St, Bristol	Pa
Equipment Associes Brasilab Ltda.	Box 5904, Rio de Janeiro	Braz
Falk & Co. Ltd., M.	Rendco House, Redgate, Surrey, Eng	
GRD-Gigger, Inc.	Swinnen Pk. Box 69, State College	Pa
INSTRUMENTATION ASSOCIATES, INC.,		
Adv Pg 236	17 W 60th St. New York 23	NY
Kidde & Co. Inc., Walter	577 Main St, Belleville 9	NJ
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
Magnaflux Corp.	7300 W Lawrence, Chicago 31	Ill
Marshall-Hewlett Ltd.	44 Tower Hill, London EC3, England	
Nesta Ultrasonics Corp.	200 Michael Dr, Syosset	NY
National Ultrasonic Corp.	95 Park Ave. Nutley 10	NJ
MERATOM, N. V., Adv Pg 112-P	Noordeinde 30, The Hague	Neth
Pall Corp.	Glen Cove	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 187	Eindhoven	Neth
PHOENIX-SHERMONT AG, Adv Pg 27	August-Thyssen-Str 1, Dusseldorf	Ger
Powertron Ultrasonics Corp.	Fryer, Ind, Pk. Plainview	NY
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	465 Hewlett Rd. Lynbrook	NY
Raytheon Co. Controls, Appar. & Sys. Div.	215 Crescent St, Waltham 54	Mass
Rosenberg Associates, Paul	100 Stevens Ave. Mt. Vernon	NY
Scott, Inc., H. H.	133 Powder Mill Rd, Maynard	Mass
Sheffield Corp. Sub. Bendix Corp.	725 Springfield St, Dayton 1	Ohio
Solar-Schell, Ltd.	Honeypot Ln. Stanmore, Middx	Eng
Sperry Products Co.	Shelter Rock Rd. Danbury	Conn
TURCO PRODUCTS, INC. Adv Pg 179	Box 1855, Wilmington	Cal
ULTRASONIC INDUSTRIES, INC.		
Adv Pg 88	Amax Co. Engrs. Hill, Plainview	NY
Union Ultra-Sonics Corp.	111 Penn St, Quincy 69	Mass
Weltronic Co.	18600 W 8 Mile Rd. Southfield	Mich
Will Corp.	Box 1660, Rochester 8	NY

URANIUM
See FUEL ELEMENTS
METALS, ALLOYS & COMPOUNDS: URANIUM
SERV. & CONS'LT: URANIUM CONVERSION

URINALYSIS
See SERV. & CONS'LT: URINALYSIS

VACUUM ANNEALING
See SERV. & CONS'LT: VACUUM ANNEALING

VACUUM CLEANERS—INDUSTRIAL

Air-Vac Engineering Co. Inc.	100 Golf St, Milford	Conn
Beaver Electric Mfg. Co.	5100 N Ravenswood Ave. Chicago 40	Ill
CAMBRIDGE FILTER CORP. Adv Pg 127	738 Erie Blvd. E, Box 1233, Syracuse 1	NY
FINNELL SYSTEM INC. Adv Pg 248	4100 East St. Elkhart	Ind
MILD FLOOR MACHINE CO. INC.		
Adv Pg 191	1317 W Washington Blvd. Chicago	Ill
Multi-Clean Products, Inc.	2277 Ford Pkwy, St. Paul 16	Minn
MERATOM, N. V., Adv Pg 112-P	Noordeinde 30, The Hague	Neth
Nuclear Research Applications Ltd.	Bell St. Reigate (Surrey)	Eng
Tennant Co. G. H.	701 N Lilac Dr. Minpls 22	Minn

VACUUM EQUIPMENT & ACCESSORIES
See Also CONTROLS—VACUUM
DETECTORS—LEAK
DRYERS—VACUUM
FURNACES—VACUUM
PUMPS—VACUUM
VALVES—VACUUM

Air-Vac Engineering Co. Inc.	100 Golf St. Milford	Conn
Associated Testing Labs. Inc.	136 Rte. 46, Wayne	NJ
Atlas Titanium, Ltd.	Centre St, Welland, Ont.	Can
Atlas Werke AG	Wolmerdinger Str. 485/486, Bremen	Ger
Atomic Lab Sub. Conco	3000 Claremont Ave, Berkeley 5	Cal
Beach-Russ Co.	420 Lexington Ave. New York 17	NY
Bruce Electric Mfg. Co.	5100 N Ravenswood Ave. Chicago 40	Ill
Cosmco	Box 6064, Jacksonville 7	Fla
Cajon Machine Co.	980 E 140th St. Cleveland 10	Ohio
CENTRAL SCIENTIFIC CO. Adv Pg 112	1700 Irving Park Rd. Chicago 13	Ill
Consflow Corp.	2160 Arch St. Philadelphia 3	Pa
Consolidated Electrodynamics Corp.	300 Sierra Madre Villa, Pasadena	Cal
Consolidated Vacuum Corp.	1775 Mt. Read Blvd, Rochester	NY
Delta Design, Inc.	8165 Adams Ave, San Diego 16	Cal
Edwards High Vacuum, Inc.	3279 Grand Island Blvd, Grand Island	NY
GELMAN INSTRUMENT CO. Adv Pg 233	Box 1119-H, Chelsea	Mich
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 12	1 River Rd. Schenectady 5	NY
General Eng. Co. (Radcliffe) Ltd.	Bury Rd, Radcliffe, Lancs.	Eng
General Thermoelectric Corp.	Princeton	NJ
General Vacuum Corp.	81 Hicks Ave, Medford	Mass
Graham Mfg. Co., Inc.	270 Great Neck Rd, Great Neck	NY
Gower Tank & Mfg. Co. Div. Union Tank Car Co.	35 E Wacker Dr. Chicago 1	Ill
Hastings-Raydist, Inc.	Hoosemain Ave, Hampton	Va
Ingersoll-Rand Co.	11 Broadway, New York 4	NY
International Pump & Machine Works	81 Doma Ave, Livingston	NJ
Ipson Industries Inc	Box 801, Rockford	Ill
Kinney Vacuum Div, The H, T, Air Brake Co.	3850 Washington St. Boston 30	Mass
Linde Engineering Labs.	Box 845, Simi Valley	Cal
Milton, Inc.	7000 S W Macadam Ave, Portland 19	Ore
Modern Lab. Equipment Co. Inc.	1811 1st Ave. New York 29	NY
Multi-Clean Products, Inc.	2277 Ford Pkwy, St. Paul 16	Minn
N.A.A., Adv Pg 59	Box 732, State College	Pa
NRC EQUIPMENT CORP. NATIONAL RESEARCH CORP.		
Adv Pg 228	80 Charlemont St. Newton Highlands 61	Mass
National Research Corp	70 Memorial Dr. Cambridge 42	Mass
New York Air Brake Co.	230 Park Ave, New York 17	NY
PHILCO CORP. LANSDALE TUBE DIV.		
Adv Pg 193	Church Rd. Lansdale	Pa
Quantelyne	Box 363, Woodland Hills	Cal
RADIO CORP OF AMERICA, ELECTRON TUBE DIV.		
Adv Pg 23	415 S 5th St. Harrison	NJ
ROYAL RESEARCH CORP. Adv Pg 21	11834 Dublin Blvd. Hayward	Cal
Scientific Glass Apparatus Co. Inc.	100 Lakewood Ter. Bloomfield	NJ
Southwestern Engineering Co.	4800 Santa Fe Ave, Los Angeles 58	Cal
STOKES CORP., F. J. Adv Pg 241	5500 Tabor Rd. Philadelphia 20	Pa
Temperature Engineering Corp.	1250 Tempsor Blvd, Riverside	NJ
THOMSON-HOUSTON ECIE. FRANCAISE,		
Adv Pg 112-D	173 Blvd. Haussman, Paris 8	Fr
Ultec Co., H. W.	2941 San Luis Rey Rd, Oceanside	Cal
Ultek Corp.	850 Commercial St, Palo Alto	Cal
Vacuum Apparatus Co.	Box 1062, Palo Alto	Cal
Vacuum-Electronic Corp.	Terminal Dr, Plainview	NY
Vacuum Ind. Applications, Ltd.	Hedgerley Rd, Widney, Lenarkshire	Scot
Vacuum Research (Cambridge) Ltd.	Quayside, Bridge St, Cambridge, Eng	
Vacuum Specialties Inc.	24 Linden St, Somerville 3	Mass
Vacuum Technology, Inc.	7003 Gianta Ave. Van Nuys	Cal
Varian Associates	611 Hansen Way, Palo Alto	Cal
Vennes pour le Traitement des Eaux, S A	1 Quai des Vennes, Liege	Belg
Wallace & Tiernan, Inc.	25 Main St, Belleville 9	NJ
Watts Regulator Co.	10 Embankment St. Lawrence	Mass
WELCH SCIENTIFIC CO. Adv Pg 192	1515 Sedgwick St. Chicago 10	Ill

VACUUM-MELTED METALS
See METALS—VACUUM-MELTED
FURNACES—MELTING

VACUUM PUMPS
See PUMPS—DIFFUSION
PUMPS—VACUUM

VALVE OPERATORS

Atomic Valve, Inc.	7919 Aquadale Ave. Cleveland 9	Ohio
ALLIS-CHALMERS MFG. CO.,		
Adv. Pgs. 109-111	933 S 70th St. Milwaukee	Wis
Automatic Switch Co.	1000 Hanover Rd, Florham Park	NJ
B-I-F Industries, Div. WT Air Brake Co.	1000-D Harris Ave, Providence 1	RI
BAILEY METER CO. Adv Pg 69	29801 Euclid Ave. Wickliffe	Ohio
Bailey Meter Co. Ltd.	3850 St. Catherine St. W, Montreal, Que	Can
Baldwin-Lima-Hamilton Corp.	Dept. N 8, Philadelphia 42	Pa
Bristol Co.	Box 1790 WBC, Waterbury 20	Conn
Copes-Vulcan Div. Blaw-Knox Co.	800 W 85 St. Erie 4	Pa
Darling Valve & Mfg. Co.	Williamsport 28	Pa
Devonsire & Co., Ltd.	Gouge Dover St. London SE1, England	
Dr. Zenth Corp.	Sartell	Minn
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 600, Groton	Conn
Electrolio Meters Co. Ltd.	Abbey Rd, Park Royal, NW10, London	Eng
Fisher Governor Co.	Box 327, Marshalltown	Iowa
General Controls Co.	801 Allen Ave, Glendale 1	Cal
Hinze Engineering Works	1787 Elston Ave. Chicago 22	Ill
Honeywell Controls, Ltd.	Vandenhoof Ave. Toronto, Ont.	Can
Hydro Aire Co. Div. Crane Co.	3000 Winona Ave. Burbank	Cal
Jordan Controls Inc.	3250 W Hampton Ave, Milwaukee 9	Wis
Mason-Neilan Div. of Worthington Corp.	Norwood	Mass
MINN-HONEYWELL REG CO. MIL PROD GROUP.		
Adv. Pgs. 138, 249	Wayne & Windrim Aves. Phila. 44	Pa

Republic Flow Meter Co. ..... 5250 Diversey Pkwy, Chicago 47 Ill
Squires Co., C. E. ..... 10608 Syracuse Ave, Cleveland 16 ..... Ohio
STOW mfg. CO. Adv Pg 257 ..... 355 Shear St. Binghamton ..... NY
Taylor Instrument Cos. ..... 38 Ames St, Rochester 1 ..... NY
WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. SECT.
Adv. Pgs. 70, 71 ..... Pittsburgh ..... Pa
Wheeler Mfg. Co. C. H. ..... 1060 Sedgley Ave, Philadelphia 38 ..... Pa

VALVES

1. BALL
2. BELLOWS-SEAL
3. BUTTERFLY
4. GAS-LOADED
5. GATE
6. GLOBE
7. LIFT
8. NEEDLE
9. PISTON
10. PLUGCOCK
11. POPPET
12. RELIEF
13. SOLENOID
14. SPRING-LOADED
15. SWING
16. VACUUM

Aero-Flow Dynamics, Inc., 3-8-13 ..... Carry ..... Pa
Aintomic Valve, Inc. 1-3-11-12-13-14-16 ..... 7313 Associate Ave, Cleveland 5 ..... Ohio
Alco Products, Inc. 5-16 ..... Box 1065, Schenectady 5 ..... NY
Allied Control Co, Inc, 13 ..... 2 E End Ave, New York 21 ..... NY
Allied Plastics Supply Corp. 1-4 ..... 75 Cliff St, New York 38 ..... NY
ALLIS-CHALMERS MFG. CO. 1-3-8,
Adv. Pgs. 109-111 ..... 925 S 70th St. Milwaukee ..... Wis
Alloy Steel Products Co. 1-2-5-6-7-8-15-16 ..... 1300 W Elizabeth Ave, Linden ..... NJ
American Instrument Co. Inc. 13 ..... 8030 Georgia Ave. Silver Spring ..... Md
American Radiator Controls Div. 5-8-13 ..... 1000 Trumbull, Detroit 8 ..... Mich
Amsco Co. 2-6-7-8-16-16 ..... 1040 S Vail Ave, Montebello ..... Cal
Associated Valve Co. 2-6-7-8-11-12-14-16 ..... Walnut & Center, North Wales ..... Pa
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI, S.-A.
Adv Pg 112-0 ..... Charleroi ..... Belg
Athomatic Valve Co. Inc. 13-16 ..... 145 W Albert St, Indianapolis ..... Ind
Atlas Titanium, Ltd, 8 ..... Centre St, Welland, Ont. ..... Can
Atlas Valve Co. 8-13 ..... 200 South St, Newark 5 ..... NJ
Atlas Werke AG, 10 ..... Westernstrasse 58, 46E/46E, Bremen ..... Ger
Atwood & Morrill Co, 2-6-5-6-7-9-12-13-14-15-16 ..... Salem ..... Mass
AUTOCLAVE ENGINEERS, INC., 8-12,
Adv Pg 209 ..... 2929 W 22nd St. Erie ..... Pa
Automatic Switch Co. 6-8-11-13-16 ..... 84W Hanover Rd. Florham Park ..... NJ
B-I-F Industries, Div. NY Air Brake Co. 3 ..... 500-D Roosevelt Ave, Providence 1 ..... RI
BAILEY METER CO. 9-14, Adv Pg 69 ..... 29801 Euclid Ave. Wickliffe ..... Ohio
Bailey Meter Co. Ltd, 6-8-9 ..... 5810 St. Catherine St. W, Montreal, Que ..... Can
Baldwin Industrial Controls, 8-13-14 ..... Dartford, Kent ..... Eng
Baldwin-Lima-Hamilton Corp. 1-3-5 ..... Dept. N 8, Philadelphia 42 ..... Pa
Beach-Russ Co. 16 ..... 450 Lexington Ave. New York 17 ..... NY
British Corp. 3 ..... Daytona Beach ..... Fla
Black, Sivalls & Bryson, Inc. 2-6-8-13-14 ..... 7500 E 12 St, Kansas City 26 ..... Mo
Brand Co. 5-6 ..... Box 1790 MBG, Waterbury 88 ..... Conn
Calmon Products Co. 13 ..... 3510 W Pico Blvd, Los Angeles 19 ..... Cal
Cash Co. A W, Div Riley Stoker 1-2-8-16 ..... 340 N 12 St. Decatur Ill
CENTRAL SCIENTIFIC CO. 16
Adv Pg 112 ..... 1700 Irving Park Rd. Chicago 13 Ill
CHANDLER EVANS CORP. 2-3-5-6-8-9-11-12-14-15
Adv Pg 120 ..... Charter Oak Blvd. West Hartford ..... Conn
Chapman Valve Mfg. Co. 5-6-8-9-13-14-15-16 ..... 500 Hampshire St. Indian Orchard ..... Mass
Chemillus Engg. Wks. Ltd. 3 ..... 100 Rue de Lyon, Geneva ..... Switz
Chase Brass & Copper Co. 5-6 ..... 236 Grand St. Waterbury ..... Conn
Cochrane Corp. 12 ..... 3214 17th St. Philadelphia 32 ..... Pa
Comflow Corp. 6-7 9-12 ..... 2106 Arch St. Philadelphia 3 ..... Pa
Consolidated Controls Corp. 1-9-13 ..... 14 Deanne Ave. Bethel ..... Conn
Consolidated Electrodynamics Corp. 16 ..... 300 Sierra Madre Villa, Pasadena ..... Cal
Consolidated Vacuum Corp. 16 ..... 1775 Mt. Read Blvd. Rochester ..... NY
Copper Vulcan Div. Blaw-Knox Co. 5-6-8-15 ..... 800 W 50 St, Erie 4 ..... Pa
Crane Co. Ind. Prods Gr. 1-2-3-5-6-7-9-13-14-15-16 ..... 4100 S Kedzie Ave. Chicago 32 Ill
Crosby Valve & Gage Co. (Admiral Valve) 5-12-14 ..... 4042 Kendrick St. Wrentham ..... Mass
Darling Valve & Mfg. Co. 3-5-13 ..... Williamsport 29 ..... Pa
Devonsco & Co., Ltd. 3-5-6-8-15-13-14-15 ..... Great Dover St. London, S.E. 1 ..... Eng
De Zurik Corp. 5-10 ..... Sartell ..... Minn
Dibble & Co., G. D 5-6-8-9-12-13 ..... Industrie Str. 15, Hengelo ..... Holl
Du All Co. 15 ..... 554 N Lowell Ave. Des Plaines Ill
Dunham-Bush, Inc., 5-7-13 ..... 179 South St. West Hartford 10 ..... Conn
Dunlop Co. Inc. 10 ..... 400 N Findlay St. Dayton 4 ..... Ohio
Eckardt AG, J. C. 3-5-6-8-9-11 ..... Pragen, 72/82, Stuttgart-bad Cannstatt ..... Ger
Edward Valves, Inc. Sub. Rockwell Mfg. Co. 6-7-8-9-12-16-16 ..... 1200 W 145th St. East Chicago ..... Ind
Edwards High Vacuum, Inc. 3-5-8-16 ..... 3279 Sweet Island Blvd. Grand Island ..... NY
Electric Boat Div Gen Dynamics Corp. 1-2-3-6-8-7-8-9-10-11-12-13-16-15-16
Elkard, 5-6-8-9 ..... Industrial Services Dept. 000, Groton ..... Conn
EIP, 1-6 ..... Heidestrasse an der Brent ..... Ger
Fanbloeta Co., The, 1-8-9-16-16 ..... Via E Cenni 5, Sori Genoa ..... Ital
Fanto Engineering Co. 8-12-14 ..... 380 Lafayette St. New York 3 ..... NY
Fisher Governor Co. 3-4-14 ..... 400 Commercial Ave. Palisades Park ..... NJ
Flight Refueling Inc. 1-2-3-4-11-12-13-14-16 ..... Box 307, Marshalltown ..... Iowa
Flight Refueling Ltd., 4-10 ..... Tower Station Arbl. Blandford, Dorset ..... Eng
Fluflow Controls, Inc., 1-3-4-5-8-11-12-13-14-16 ..... 1701 Elizabeth Ave. E, Linden ..... NJ
FOXBORO CO. 2-3-5-6-11-14,
Adv Pg 180 ..... 38 Neponset Ave. Foxboro ..... Mass
GELMAN INSTRUMENT CO. 16,
Adv Pg 200 ..... Box 1148-H, Chelsea ..... Mich
General Controls Co. 1-2-3-5-6-8-9-10-11-12-13-14-15-16 ..... 801 Allen Ave. Glendale 1 ..... Cal
General Eng. Co. (Radcliffe) Ltd. 16 ..... Bury Rd, Radcliffe, Lancs. ..... Eng
General Electric Corp. 1-2-5-8-13 ..... 197 S Van Brunt St, Englewood ..... NJ
General Vacuum Corp. 16 ..... 81 Hicks Ave. Medford ..... Mass
Gould Co., John D. 13 ..... 4707 Massachusetts Ave, Indianapolis 18 ..... Ind
Grover Water Conditioning Co. 13 ..... 216 W 14 St, New York 11 ..... NY
Hammel-Dahl/Vinco Engineering Div. General Controls Co. 2-5-6-8-9-12-14-15
Hannes S.A. Atelier, 3, 2-6-13-14 ..... Monceau-sur-Sambre ..... Belg
Haveg Industries Inc. 1-2-5-6-16 ..... 900 Greenbank Rd, Wilmington 8 ..... Del
Hays Mfg. Co. 13 ..... 814 W 12th St. Erie ..... Pa
Hills-McCanna Co. 1-16 ..... 400 Maple Ave. Carpentersville Ill
Hoke, Inc. 1-2-8-12-13-14-16 ..... 1 Tantalill Pk. Cranford ..... NJ
Honeywell Controls, Ltd, 2-3-12-13 ..... Vandenhoof Ave, Toronto, Ont Canada
Hupp Aviation Co. Div. of Hupp Corp. ..... 6532 W 65th St. Chicago 38 Ill
Hydro Aire Co. Div. Crane Co. 1-2-8-9-11-12-13-14 ..... 3600 Winona Ave. Burbank ..... Cal
HYDROTHYNE CORP. 2-5-11-13-13-14,
Adv Pg 129 ..... 7350 Coldwater Canyon Ave. N. Hollywood ..... Cal
Hydromatics, Inc. 1-16 ..... 8 Lawrence St. Bloomfield ..... NJ
Imperial-Eastman Corp. 8-16 ..... 6800 W Howard St, Chicago 48 Ill
Industrial Instrument Corp., 8 ..... Drawer 777, Austin ..... Tex
James, Ford & Clark, Inc. 10-11-12-16 ..... 2181 E Foothill Blvd, Pasadena ..... Cal
Johnson Corp. 13 ..... 809 Wood St, Three Rivers ..... Mich
Johnson Service Co. 14 ..... Milwaukee 1 ..... Wis
Kohlenberg Bros. Co. 1-9-11-12-13 ..... 1848 N Monroe St. Two Rivers ..... Wis
Kuellstin Hydraulics Ltd, 8-12-13 ..... Allesley, Coventry, Warwickshire, Eng
Keystone Valve Corp., 3 ..... 5305 Kirby Dr. Houston ..... Tex
Kidde & Co. Inc., Walter, 12-13 ..... 377 Main St. Belleville 9 ..... NJ
Kinney Vacuum Div. The N. Y. Air Brake Co. 16 ..... 3529 Washington St. Boston 30 ..... Mass
Kontz-Wagner Electric Co. 13 ..... N Michigan & Marion, South Bend ..... Ind
Kunkle Valve Co., 12-14 ..... 211 S Clinton St. Fort Wayne ..... Ind
Laboratory Furniture Co. Inc. 8-10-18 ..... Old Country Rd. Mineola ..... NY
Ladish Co. 1-3-5-6-7-8-10-15 ..... 5481 S Packard Ave. Cudahy ..... Wis
LAND-AIR INC. SUB. DYNALECTRON INC. 13,
Adv Pg 204 ..... 7464 W Wilson Ave. Chicago 31 Ill
Lawrence Co. Inc., R. G., 13-16 ..... 134 Summit St, Tenafly ..... NJ
Lincoln Instrument Co. Div. Colorado Oil & Gas Corp. 8-13 ..... 3501 Howard St, Skokie Ill
Lunco-Nelles Div. of Worthington Corp. 2-5-8-16 ..... Norwood ..... Mass
Marlboro Co., 8 ..... 302 Paterson Plank Rd. E Rutherford ..... NJ
Metal Bellows Corp. 3 ..... 615 Mica Lane Wellesley ..... Mass
Milton, Inc. 16 ..... 7020 S W Macadam Ave, Portland 19 ..... Ore
MINN-HONEYWELL REG CO. HDL PRODS GROUP, 3-6,
Adv. Pgs. 138, 248 ..... Wayne & Windsor Aves. Phila. 44 ..... Pa
MRC EQUIPMENT CORP. NATIONAL RESEARCH CORP. 16,
Adv Pg 238 ..... 68 Charlemont St. Newton Highlands 61 ..... Mass
NATIONAL CARBON CO. DIV. OF UCC, 6,
Adv. Pgs. 96, 97 ..... 270 Park Ave. New York 17 ..... NY
National Research Corp. 16 ..... 70 Memorial Dr. Cambridge 42 ..... Mass
New York Air Brake Co, 2-3-9-15-12-13-14-16 ..... 230 Park Ave. New York 17 ..... NY
Newnes, Hunter & Co. Ltd. 3-5-6-7-8-10-11-15-16 ..... Woodchester, Stroud, Gloucester ..... Eng
Nuclear Products Co. 8-11-12-16 ..... 15635 Saranac Rd. Cleveland 10 ..... Ohio
Ohio Injector Co. 5-6-7-15 ..... 275 Main St. Wadsworth ..... Ohio
ON MARK COUPLINGS, 1-11-12,
Adv Pg 79 ..... 4440 York Blvd. LA 41 ..... Cal
Pacific Valves, Inc. 1-5-6-13-14-16 ..... 3031 Walnut Ave. Long Beach ..... Cal
Parker Aircraft Co. 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16 ..... 5857 W Century Blvd, Los Angeles 45 ..... Cal
Pfaudler Co. Div. Pfaudler Permutit Inc. 5-6-13-15 ..... 1000 West Ave. Rochester 3 ..... NY
Powell Co., Wm., The, 2-5-6-7-8-10-12-14-15 ..... 2503 Spring Grove Ave, Cincinnati 23 ..... Ohio
PRATT CO., HENRY, 1-3, Adv Pg 223 ..... 319 W Pershing Rd, Chicago 7 Ill
R-P & C Valve Div. Amer. Chain & Cable Co. Inc. 1-5-6-8-15 ..... Bradford ..... Pa
Republic Flow Meter Co., 5-6 ..... 2240 Diversey Pkwy, Chicago 47 Ill
Research Inc. 13 ..... Box 6164, Edina Sta. Minpls 24 ..... Minn
Robertshaw-Fulton Controls Co, Fulton Sylphon Div. 3 ..... Box 400, Knoxville 1 ..... Tenn
Rockwell Co., W. S. 9-15-16 ..... 200 Elm St. Fairfield ..... Conn
Roy Co., Milton, 15 ..... 1300 E Mermaid Ln. Phila 18 ..... Pa
Ruggles-Klingemann Mfg. Co., 12-13-14-15 ..... Salem ..... Mass
SAINT-GOBAIN NUCLEAIRE, 16,
Adv Pg 229 ..... 23 Bd G. Clemenceau, Courbevoie, Seine ..... Fr
Schutte & Koerting Co 3-5-8-12-13-14-15 ..... Cornwell Heights, Bucks County ..... Pa
Sealol Inc. 1-9-11-13 ..... Warwick Ind, Pk, Providence 6 ..... RI
SOCIETE RATEAU 2-3-4-5-12-13-14-15-16,
Adv Pg 113-T ..... Rue Rateau Le Courneuve, Seine ..... Fr
STOKES CORP., F. J. 1-5-11-16,
Adv Pg 241 ..... 5500 Tabor Rd. Philadelphia 20 ..... Pa
Talbot Steel Tube Co, Ltd, 16 ..... Green Ln. Walsall, Staffs, England
Taylor Instrument Cos. 8-9 ..... 38 Ames St. Rochester 1 ..... NY
Telecomputing Corp. 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16 ..... 8155 Aero Dr. San Diego 11 ..... Cal
Tosi, S.p.A., Franco, 2-5-12-13 ..... Legnano, Milan ..... Ital
Tuborcraft Inc. 1-3-9-11-12-13-14 ..... 1946 S Myrtle Ave. Monrovia ..... Cal
Ulrich Corp. 2-16 ..... 820 Commercial St. Palo Alto ..... Cal
United Shoe Machinery Corp. Atomic Power Dept. 5-8-16 ..... Beach St. Beverly ..... Mass
Vacuum Apparatus Co. 2-16 ..... Box 1001, Palo Alto ..... Cal
Vacuum-Electronic Corp. 16 ..... Terminal Dr. Plainview ..... NY
Vacuum Ind. Applications, Ltd., 5-16 ..... Netherton Rd. Wishaw, Lanarkshire ..... Scot
Vacuum Research (Cambridge) Ltd. 5-7-15-16 ..... Quayside, Bridge St. Cambridge ..... Eng
Vacuum Specialties Inc. 16 ..... 34 Linden St. Somerville 3 ..... Mass
Valcor Engineering Corp. 1-6-8-13 ..... 335 Carnegie Ave, Kenilworth ..... NJ
Varian Associates, 16 ..... 611 Hansen Way, Palo Alto ..... Cal
Vickers-Armstrongs (Engg) Ltd. 8-12-13 ..... Broadway, Westminster, London SW 1 ..... Eng
Vickery Co. 1 ..... 610 10th St, Oakland 12 ..... Cal
Vogt Machine Co., Henry, 5-6 ..... 1060 W Ormsby St, Louisville ..... Ky
W-K-M Div. of ACF Industries, 1-5-13 ..... Box 2317, Houston ..... Tex
Wade, Couplings, Ltd., 8 ..... 270 High Rd. Ilford, Essex ..... Eng
Watson-Marlow Air Pump Co, 5-8-16-16 ..... Marlow Bucks, England
Watts Regulator Co. 12 ..... 10 Embankment St. Lawrence ..... Mass
WELCH SCIENTIFIC CO. 16, Adv Pg 192 ..... 1515 Sedgwick St. Chicago 10 Ill
Western Affiliated Engrg Co. 1-6-7-8-9-14 ..... Bldg 69, MSD, Clearfield, Ogden ..... Utah
WESTINGHOUSE ELEC. CORP. ATOMIC EQUIPMENT DEPT. 5-6-7-8-13-15,
Adv. Pgs. 18, 19 & 70, 71 ..... Cheswick ..... Pa
Williamson Iron & Steel Co, 1-8 ..... 200 NW Front Ave, Portland ..... Ore
Worcester Valve Co. Inc. 1-8-16 ..... 16 Parker St. Worcester 10 ..... Mass

VANADIUM

See METALS, ALLOYS & COMPOUNDS

VENTILATION EQUIPMENT

See Also FANS
AIR-CONDITIONING UNITS
SERV. & CONS'LT: VENTILATION-SYSTEM DESIGN

Accurate Sheet Metal & Mfg. Works Inc. ..... 2205-46 Milwaukee Ave. Chicago 47 Ill
American Air Filter Co. ..... 215 Central Ave, Louisville 8 ..... Ky
Buffalo Forge Co. ..... 400 Broadway, Buffalo 4 ..... NY
CAMBRIDGE FILTER CORP. Adv Pg 187 ..... 738 Erie Blvd. E, Box 1288, Syracuse 1 ..... NY
Canadian Westinghouse Co. Ltd. ..... Box 510, Hamilton, Ontario, Canada
De Vilbiss Co. ..... 300 Phillips Ave, Toledo 1 ..... Ohio
Electric Boat Div. Gen. Dynamics Corp. ..... Industrial Services Dept. 000, Groton ..... Conn
Haveg Industries Inc. ..... 900 Greenbank Rd, Wilmington 8 ..... Del
Kraftwerk Lüftechnik, H. ..... Aachen-Richterich ..... Ger
L'Electronique Appliquee ..... 28 rue de Docteur Finlay, Paris 16 ..... Fr
Matthews & Yates Ltd, Cyclone Wks. ..... Swinton, Manchester, England
Nuclear Research Applications Ltd. ..... Bell St. Reigate (Surrey) ..... Eng
Parker Aircraft Co ..... 5857 W Century Blvd, Los Angeles 45 ..... Cal
Robbins & Myers, Inc. ..... 1360 Lagonda Ave. Springfield ..... Ohio
SAINT-GOBAIN NUCLEAIRE, Adv Pg 229 ..... 23 Bd G. Clemenceau, Courbevoie, Seine ..... Fr
SOCIETE RATEAU, Adv Pg 113-T ..... Rue Rateau Le Courneuve, Seine ..... Fr
Stamford Fan Co. Inc. ..... 4 South St. Stamford ..... Conn
Westinghouse Corp.
Disc & Vane Control Div. ..... 1480 S Lyndhurst St. Indianapolis ..... Ind
York Corp. ..... Grantley Rd. York ..... Pa

VESSELS—PRESSURE, REACTOR

See Also CALANDRIAS—REACTOR

Advanced Technology Labs. ..... 1882 Wilkinson Rd. Mountain View ..... Cal
Alco Products, Inc. ..... Box 1065, Schenectady 5 ..... NY
ALLIS-CHALMERS MFG. CO.,
Adv. Pgs. 109-111 ..... 925 S 70th St. Milwaukee 1 ..... Wis
Alsthom, Nuclear Div. ..... 38, Ave. Kleber, Paris 16, France
American Cast Iron Pipe Co. ..... Box 2603, Birmingham 2 ..... Ala
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,
Adv Pg 112-0 ..... Charleroi ..... Belg
AUTOCLAVE ENGINEERS, INC.,
Adv Pg 209 ..... 2929 W 22nd St. Erie ..... Pa
AVERY & SAUL CO., Adv Pg 73 ..... 115 Bridge Ave. Cambridge ..... Mass
BABCOCK & WILCOX CO.
Adv. Pgs. 34, 35 ..... 161 E 42 St. New York 17 ..... NY
Babcock & Wilcox Ltd. ..... 209 Euston Rd. London NW 1, England
Baldwin-Lima-Hamilton Corp. ..... Dept N 8, Philadelphia 42 ..... Pa
Bethlehem Steel Corp. ..... 701 E 3rd St. Bethlehem ..... Pa
CPV ENGINEERING CORP. Adv Pg 236 ..... Box 36, Dorchester ..... Mass
Canadian Westinghouse Co. Ltd. ..... Box 510, Hamilton, Ontario, Canada
Chicago Bridge & Iron Co. ..... 332 S Michigan Ave. Chicago 4 Ill
Cochrane & Co. Annan, Ltd. ..... 34 Victoria St. London SW1, England
Combustion Engineering, Inc. ..... 200 Madison Ave. New York 16 ..... NY
Consolidated Western Steel Div. U. S. Steel Corp. ..... Box 2015, Term Ann, L A 54 ..... Cal
CONTROLLED ATMOSPHERE ENCLOSURES MFG CO
Adv Pg 38 ..... Leonard Air Base, Hartmann ..... Pa
Electric Boat Div. Gen. Dynamics Corp. ..... Industrial Services Dept. 000, Groton ..... Conn
English Steel Corp. Ltd. River Don Wks. ..... Sheffield 9, Yorkshire ..... Eng
FOSTER WHEELER CORP. Adv Pg 128 ..... 666 5th Ave. New York 19 ..... NY
Fraser & Co. Ltd., W. J. ..... Nassau Hill, Sandiacre, Nottingham ..... England
General American Transportation Corp. ..... 135 S LaSalle St. Chicago 3 Ill
Graver Tank & Mfg. Co. Div. Union Tank Car Co. ..... 56 E Wacker Dr. Chicago 1 Ill
GRAY TOOL CO. Adv Pg 72 ..... 7135 Ardmore, Box 2291, Houston 1 ..... Tex
Gutehoffnungshutte Sterkrade AG ..... Lipperfeld 1, Oberhausen Rhld. ..... Ger
Harvey & Co. (London) Ltd., G. A. ..... Woolwich Rd. London, SE7 ..... Eng
Hitachi, Ltd. ..... 1-4 Marunouchi, Chiyoda-ku, Tokyo ..... Jap

Steeve Steel Works, Ltd.	55 Adelaide St. W, Toronto	Ont
Kelley & Co., G. G.	95 Taylor St, Boston 22	Mass
Leslie Boiler & Engineering Corp.	2801 S Wolcott Ave, Chicago 8	Ill
Leader Iron Works, Inc.	2110 N Jasper St, Decatur	Ill
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
Mousco Mfg. Co.	888 S San Fernando Blvd, Burbank	Cal
NATIONAL ANNEALING BOX CO.		
Adv Pg 106	Box 520, Washington	Pa
National Forge Co	Irvine, Warren City	Pa
NERATOOM, N. V., Adv Pg 113-F	Noordeinde 38, The Hague	Neth
New York Shipbuilding Corp.	Camden 1	NJ
NEWBROOK MACHINE CORP., Adv Pg 93	Silver Creek	NY
Nooter Corp.	1456 S 3rd St, St. Louis 66	Mo
PACIFIC COAST ENGINEERING CO.		
Adv Pg 200	Drawer E, Alameda	Cal
Patterson Foundry & Machine Co.	East Liverpool	Ohio
Pfaudler Co. Div. Pfaudler Permutit Inc.	1000 West Ave, Rochester 3	NY
PHOENIX-RHEINROHR AG, Adv Pg 27	August-Thyssen-Str 1, Duesseldorf	Ger
Pittsburgh-Des Moines Steel Co.	Neville Island, Pittsburgh 25	Pa
Radiation Products, Inc.	Pt. 40 Rd, Flushing 52	NY
RHEINSTAHL AG, Adv Pg 113-E	Steinbauer Str. 20, Witten-Annen	Ger
SANDUSKY FOUNDRY & MACHINE CO.		
Adv Pg 33	W Market St. Sandusky	Ohio
Smith Corp., A. O., Atomic & Process Equip. Div.	3533 N 27 St. Milwaukee 1	Wis
Societe Piver-Poubet	240 rue Saint-Honore, Paris 1, France	
SOCIETE RATEAU, Adv Pg 113-T	Rue Rateau La Courneuve, Seine	Fr
Southwestern Engineering Co.	4000 Santa Fe Ave, Los Angeles 58	Cal
STEARNS-ROGER MFG. CO. Adv Pg 52	Box 5888, Denver 17	Colo
Sulzer Bros. Ltd.	Winterthur	Swit
Thompson, Ltd., John	Wolverhampton, England	
Tosi, S.p.A., Franco	Legnano, Milan	Ital
Vogt Machine Co., Henry	1005 W Bensley St. Louisville	Ky
WESTINGHOUSE ELEC CORP. STEAM DIV.		
Adv. Pgs. 70, 71	Lester	Pa
Willamette Iron & Steel Co.	280 NW Front Ave, Portland	Ore

VIBRATORY POWDER—COMPACTION EQUIPMENT

Aeroprojects Inc.	310 E Rosedale Ave, West Chester	Pa
Branford Co.	132 Glen St. New Britain	Conn
Gentisco Inc.	2233 Federal Ave, Los Angeles 64	Cal
Syntron Co.	2305 Lexington Ave, Homer City	Pa

VIEWING EQUIPMENT

See BORESCOPES
OPTICAL INSTRUMENTS & PARTS
PERISCOPES
SHIELDING—RADIATION, WINDOWS
TELEVISION SYSTEMS—CLOSED-CIRCUIT

VISCOSITY CONTROLS

See CONTROLS—VISCOSITY

VOLTMETERS

A. E. I. Ltd.	30 Grosvenor Pl. London SW1, England	
Assembly Products, Inc.	76 Wilson Mills Rd. Chesterland	Ohio
Aveley Electric, Ltd.	S. Ockendon, Essex, England	
Baldwin Industrial Controls	Dartford, Kent, England	
Bristol Co.	Box 1790 MRG, Waterbury 20	Conn
Cambridge Instrument Co., Ltd.	13 Grosvenor Pl. London SW1, Eng	
Columbia Electric Mfg. Co.	4818 Hamilton Ave, Cleveland 14	Ohio
Electronic Associates, Inc.	Long Branch	NJ
Engelhart Industries, Inc.	113 Astor St, Newark 3	NJ
Epic, Inc.	150 Nassau St. New York 38	NY
Esterline-Angus Co.	Box 596, Indianapolis 6	Ind
Evershed & Vignoles, Ltd. Acton Lane Wks.	Chiswick, London W4	Eng
Fermont Electric, Inc	Industrial Pk. 91, Plainview	NY
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 12	1 River Rd. Schenectady 5	NY
General Motors, Inc.	Box 1701, Grand Junction	Colo
Heiser Inc.	530 E Imperial Hwy, El Segundo	Cal
Heath Co.	Benton Harbor	Mich
Hellipot Div. of Beckman Instruments, Inc.	2500 Harbor Blvd, Fullerton	Cal
Hickok Electrical Instrument Co.	10561 Dupont Ave, Cleveland 8	Ohio
INTERNATIONAL INSTRUMENTS, INC.,		
Adv. Pgs. 226, 229	Box 2954, New Haven 18	Conn
Jennings Radio Mfg. Corp.	970 McLaughlin Ave, San Jose 5	Cal
Kin Tel Div Cohu Electronics Inc	5725 Kearny Villa Rd, San Diego 12	Cal
LANDSVERK ELECTROMETER CO.		
Adv Pg 210	641 Isabel Ave. Glendale 1	Cal
Nagrett & Zambra (Canada) Ltd	4 Brentcliff Rd. Toronto 14	Ont
NERATOOM, N. V., Adv Pg 113-F	Noordeinde 38, The Hague	Neth
Non-Linear Systems, Inc.	Delmar Airport, Delmar	Cal
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 107	Eindhoven	Neth
PHYSICAL SCIENCES CORP. Adv Pg 26	209 N Fair Oaks Ave, Pasadena	Cal
Pye & Co. Ltd., W. G.	Tech St, Cambridge, England	
Q. V. S., Inc.	35 N 15th St, E Orange	NJ
RADIO CORP OF AMERICA, ELECTRON TUBE DIV.		
Adv Pg 23	415 S 5th St. Harrison	NJ
RAWSON ELECTRICAL INSTRUMENT CO.		
Adv Pg 44	114 Putter St. Cambridge 42	Mass
S.A.M.E.S., Adv Pg 234	21 rue Jean Moco, Grenoble, Isere	Fr
Sangamo Electric Co.	11 & Converse Sts, Springfield	Ill
SANWA ELECTRIC INSTRUMENT MFG. LTD. Adv Pg 188	1077 Kojimbshi, Kokubunji-machi, Kitatama-gun, Tokyo	Jap
Shallcross Mfg. Co.	130 Wallace St. New Haven 5	Conn
Siemens & Halske AG	Rheinstrasse 20, Karlsruhe	Ger
Simpson Electric Co. Div. Amer Gage & Mach Co.	5200 W Kinzie St, Chicago 44	Ill
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 113-C	240 W 17th St. New York 11	NY
Tito Laboratories, Inc.	Plainview	NY
WESTINGHOUSE ELEC. CORP. INSTRUMENT DEPT.		
Adv. Pgs. 70, 71	Newark	NJ

VOLTMETERS—ELECTRONIC

Assembly Products, Inc.	76 Wilson Mills Rd. Chesterland	Ohio
Aveley Electric, Ltd.	S. Ockendon, Essex, England	
Berkeley Instruments Inc. Systems Div.	2400 Harbor Blvd. Fullerton	Cal
Berkeley Div. Beckman Instruments Inc.	2200 Wright Ave. Richmond	Cal
Brüel & Kjaer	Lille Allé 33, Naerum, Den	
Burndept Ltd.	Ware St. Erith, Kent, Eng	
Burr-Brown Res. Corp.	Box 6066, Tucson	Ariz
Cambridge Instrument Co., Ltd.	13 Grosvenor Pl, London SW1, Eng	
Dawe Instruments Ltd.	Western Ave. Acton, London W3	Eng
Dymec Div. Hewlett-Packard Co.	395 Page Mill Rd, Palo Alto	Cal
E-H Research Labs. Inc.	1403 Aileline St. Oakland 20	Cal
Electronic Associates, Inc.	Long Branch	NJ
Flow Corp.	11 Carleton St. Cambridge 42	Mass
Fluke Mfg. Co. Inc., John	Box 9083, Seattle	Wash
FRANKLIN ELECTRONICS, INC.		
Adv Pg 230	E Fourth St. Bridgeport	Pa
General Motors, Inc.	Box 1701, Grand Junction	Colo
General Radio Co.	West Concord	Mass
Gyro Electronics Corp.	Box 184 La Grange	Ill
Heath Co.	Benton Harbor	Mich
Hewlett-Packard Co.	1501 Page Mill Rd, Palo Alto	Cal
Hickok Electrical Instrument Co.	10561 Dupont Ave, Cleveland 8	Ohio
Kin Tel Div Cohu Electronics Inc.	5725 Kearny Villa Rd. San Diego 12	Cal
Leeds & Northrup Co.	4936 Stenton Ave, Phila 44	Pa
Lockheed Aircraft Corp.	Box 551 Burbank	Cal
Muirhead Instruments Inc.	441 Lexington Ave, New York 17	NY
NERATOOM, N. V., Adv Pg 113-F	Noordeinde 38, The Hague	Neth
Nuclear-Electronics Corp.	2005 N Broad St, Philadelphia 32	Pa
Philips Electronic Instruments	750 S Fulton Ave, Mt. Vernon	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 107	Eindhoven	Neth
Poenicke & Co. oHG	Box 2786, Frankfurt/Main 1	Ger
Pye & Co. Ltd., W. G.	Tech St. Cambridge, England	
Rural Instruments Ltd.	Wooton Rd. Bracknell, Berks, England	
RADIATION TECHNOLOGY, INC.		
Adv. Pg. 3rd Cover	657 Antone St. NW, Atlanta 18	Ga
RADIO CORP OF AMERICA, ELECTRON TUBE DIV.		
Adv Pg 23	415 S 5th St. Harrison	NJ
Siemens & Halske AG	Rheinstrasse 20, Karlsruhe	Ger
Simpson Electric Co. Div. Amer Gage & Mach Co.	5200 W Kinzie St, Chicago 44	Ill
Smith-Florence, Inc.	Overlake Ind. Pk. Box 717, Redmond	Wash
Specialty Electronics Devel. Corp.	132-01 39th Ave. Flushing	NY
Symmes-Donner Corp.	860 Gallardo St, Concord	Cal
Telaview Industries Corp.	30-08 37th St, LIC 1	NY
TERMINAL RADIO INTERNATIONAL LTD.		
Adv Pg 113-C	240 W 17th St. New York 11	NY
Tito Laboratories, Inc.	Plainview	NY
Vosper Electronics Ltd.	Flagstaff Sq. Pen. New Malden, Surrey, Eng	

WASTE-DISPOSAL EQUIPMENT

See Also SERV. & CONS'LT: WASTE DISPOSAL

AmF ATOMICS, Adv. Pgs. 76, 77, 90	140 Greenwich Ave. Greenwich	Conn
ALLIS-CHALMERS MFG. CO.,		
Adv. Pgs. 109-111	933 S 70th St. Milwaukee	Wis
AMERAY CORP., Adv Pg 113	Route 46, Rockaway	NJ
ATELIERS de CONSTRUCTIONS ELECTRIQUES de CHARLEROI,		
Adv Pg 112-B	Charleroi	Belg
Belge de Chimie Nucleaire, Sa.	56 rue des Colonies, Brussels	Belg
Chiyoda Chemical Eng. & Const. Co Ltd	1-90, Hibiya-Kadokawa, Chiyoda-ku, Tokyo, Japan	
Combustion Engineering, Inc.	200 Madison Ave, New York 16	NY
Condenser Service & Engg. Co. Inc.	150 Chestnut Hwy, Hoboken	NJ
Edlow Lead Co.	720 Rock St. Columbus 16	Ohio
Electric Boat Div. Gen. Dynamics Corp.	Industrial Services Dept. 888, Groton	Conn
Flight Refueling Inc.	Box 1781, Baltimore 3	Md
Hitachi, Ltd.	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
HORIBA INSTRUMENTS, INC.		
Adv Pg 207	Hakaidomichi Sanjo, Nakagyo, Kyoto	Jap
Infilco Inc.	Box 5033, Tucson	Ariz
Isotopes Specialties Co.	Box 608, Burbank	Cal
Knapp Mfg. Inc.	23-18 Borden Ave. LIC 1	NY
Lockheed Aircraft Corp	Box 551, Burbank	Cal
NUCLEAR ENGINEERING CO. INC.,		
Adv Pg 139	65 Bay St. Box 238, Pleasanton	Cal
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),		
Adv. Pgs. 217, 219, 221	1007 Warren St. Apollo	Pa
Olsen Filtration Engineers Div. Amer. Ldry. Mach. Co.	5406 Section Ave. Cinc 13	Ohio
Permutit Co. Div. Pfaudler Permutit Inc.	60 W 44th St. New York 36	NY
Plastimayd Corp.	2204 SE 7th Ave, Portland 14	Ore
Radiation Products, Inc.	Pt. 40 Rd, Flushing 52	NY
Reliance Incorporated	1210-1212 Adams Ave, Phila 24	Pa
SAint-GOBAIN NUCLEAIRE, Adv Pg 229	23 Rd G. Clemenceau, Courbevoie, Seine	Fr
Salem-Brosius Inc.	Box 2222, Pittsburgh 30	Pa
Smith & Co., T. L.	5936 N 32nd St, Milwaukee 1	Wis
Thompson, Ltd., John	Wolverhampton, England	
UNITED NUCLEAR CORP., Adv Pg 36	263 Winchester Ave. New Haven 4	Conn
Vosper pour le Traitement des Eaux, S A	1 Quai des Vennes, Liege	Belg
Wallace & Tiernan, Inc.	25 Main St, Belleville 9	NJ
WORTHINGTON CORP.		
Adv. Pg. 2nd Cover	401 Washington Ave. Harrison	NJ

WASTE TREATMENT—RADIOACTIVE

See SERV. & CONS'LT: WASTE TREATMENT, RADIOACTIVE

WATER CONDITIONERS

See Also DEMINERALIZERS
ION-EXCHANGE EQUIPMENT

ALLIS-CHALMERS MFG. CO.,		
Adv. Pgs. 109-111	933 S 70th St. Milwaukee 1	Wis
Aqua-Chem, Inc.	225 N Grand Ave. Waukesha	Wis
B-I-F Industries, Div. NY Air Brake Co.	800-D Harris Ave, Providence 1	RI
Balco Ind Equip Div Bogue Elec Mfg. Corp.	108 Pennsylvania Ave, Paramus	NJ
Bio-Rad Laboratories	2307 S 32nd St, Richmond	Cal
Chem-Pure Service Co.	702 Industrial Rd. San Carlos	Cal
Cochrane Corp.	3214 17th St. Philadelphia 32	Pa
Crystal Research Labs, Inc.	29 Alps St. Hartford	Conn
Dorr-Oliver Inc.	77 Havemeyer Ln, Stamford	Conn
ELGIN SOFTENER CORP. Adv Pg 116	179 N Grove Ave. Elgin	Ill
Fischer & Porter Co.	20 Warminster Rd, Warminster	Pa
Garrett Corp.	9851 Sepulveda Blvd, Los Angeles 45	Cal
GELMAN INSTRUMENT CO. Adv Pg 233	Box 1148-H, Chelsea	Mich
General American Transportation Corp.	135 S LaSalle St. Chicago 3	Ill
Gower Water Conditioning Co.	218 W 14 St. New York 11	NY
HAGAN CHEMICALS & CONTROLS, INC.		
Adv Pg 38	Box 1346, Pittsburgh 30	Pa
Hollinger Machine Co. Ltd.	3860 St. Urbain St. Montreal	Can
Illinois Water Treatment Co.	840 Cedar St. Rockford	Ill
Infilco, Inc.	Box 5033, Tucson	Ariz
Oakite Products, Inc.	19 Rector St. New York 6	NY
Penfield Mfg. Co. Inc.	48 Bennett St. Meriden	Conn
Permutit Co. Div. Pfaudler Permutit Inc.	60 W 44th St. New York 36	NY
Philadelphia Quartz Co.	1146X Public Ledger Bldg, Phila. 6	Pa
Pumps & Softeners Ltd.	680 Waterloo St. London	Ont
SAint-GOBAIN NUCLEAIRE, Adv Pg 229	23 Rd G. Clemenceau, Courbevoie, Seine	Fr
Salem-Brosius Inc.	Box 2222, Pittsburgh 30	Pa
Stauffer Chemical Co.	380 Madison Ave. New York 17	NY
Thompson, Ltd., John	Wolverhampton, England	
Vosper pour le Traitement des Eaux, S A	1 Quai des Vennes, Liege	Belg
Wallace & Tiernan, Inc.	25 Main St, Belleville 9	NJ

WATER—DISTILLED

Aqua-Chem, Inc.	225 N Grand Ave. Waukesha	Wis
BARNSTEAD STILL & STERILIZER CO.		
Adv Pg 216	84 Lanesville Ter. Boston 31	Mass
Chem-Pure Service Co.	702 Industrial Rd. San Carlos	Cal
Gesellschaftswerke Saalfelde AG	Lippenfeld 1, Chorbusen 18-34	Ger

WATER—HEAVY

See Also ISOTOPES—STABLE

Abbott Laboratories	Box 1008, Oak Ridge	Tenn
Bio-Rad Laboratories	2307 S 32nd St, Richmond	Cal
Mackay, Inc., A. D.	198 Broadway, New York 38	NY
NOMA DENKO K. K., Adv Pg 113-G	24 Bito Miyamoto-cho, Minato-ku, Tokyo	Jap
Sulzer Bros. Ltd.	Winterthur	Swit
U. S. NUCLEAR CORP., Adv Pg 127	891 N Lake St. Box 2022, Burbank	Cal

WATER MONITORS—RADIOACTIVITY

See Under MONITORS—RADIATION

WELDING EQUIPMENT

See Under FABRICATING EQUIPMENT
SERV. & CONS'LT: WELDING, NUCLEAR

WELL-LOGGING EQUIPMENT

See Also SERV. & CONS'LT: WELL-LOGGING

Dresser Research Div. Dresser Ind. Inc.	16706 Independence St. Tulsa	Okla
Equipment Atomica Brasileira Ltda.	Box 2954, Rio de Janeiro	Braz
FRANKLIN SYSTEMS, INC. Adv Pg 236	2724 Hillsboro Rd. W Palm Beach	Fla
KAMAN NUCLEAR, Adv. Pgs. 190, 191	Garden of the Gods Rd. Colo Springs	Colo
LIONEL ELECTRONIC LABS.		
Adv Pg 218	1226 Flushing Ave. Brooklyn 37	NY

NERATOM, N. V., Adv Pg 112-F	Noordeinde 38, The Hague	Neth
NUCLEAR MATERIALS & EQUIP. CORP. (NUMEC),		
Adv. Pgs. 217, 219, 221	1080 Vanoe St. Apollo	Pa
NUCLEONIC CORP. OF AMERICA,		
Adv Pg 180	176 Pegnere St. Brooklyn 21	NY
TECHNICAL MEASUREMENT CORP.		
Adv Pg 63	443 Washington Ave. North Haven	Conn
Uranium Instruments Co.	Box 1181, Grand Junction	Colo

WHOLE-BODY COUNTERS

See COUNTERS--RADIATION, WHOLE-BODY

WINDOWS--COUNTER

Alexander Vacuum Research Inc.	505 Madison Ave, New York 17	NY
Ashville-Shannahan Mica Co.	900 Jefferson Ave, Newport News	Va
Atomomy-Spectron Corp	111 W Jewel Ave, St. Louis 22	Mo
ATOMIC ACCESSORIES, INC., Adv Pg 286	811 W Merrick Rd. Valley Stream	NY
Atomic Devel. & Machine Corp.	15-04 150 St, College Point 56	NY
BAIRD-ATOMIC INC. Adv Pg 87	33 University Rd. Cambridge 38	Mass
Chemicam Corp. of America	Box 1250, Waterbury 90	Conn
Equipment Atomicos Brasilab Ltda.	Box 2504, Rio de Janeiro	Braz
Evans & Son (Furmanite) Ltd., J.,		
Mercyn Wks.	Goldsmith Ave, Portsmouth, Hants	Eng
FORRO SCIENTIFIC CO. Adv Pg 234	820 Lincoln St. Evanston	Ill
HARSHAW CHEMICAL CO. Adv Pg 89	1945 E 97th St. Cleveland 6	Ohio
L'Electronique Appliquee	26 rue de Docteur Finlay, Paris 15	Fr
RADIATION COUNTER LABS. INC.		
Adv. Pgs. 62, 63	5122 W Grove St. Skokie	Ill
RADIATION EQUIP. & ACCESSORIES CORP.		
Adv. Pg. 3rd Cover	465 Hendrick Rd. Lyndhurst	NY
RADIATION INSTRUMENT DEVELOPMENT LAB.		
Adv. Pgs. 216, 220A-D	61 E Ninth Ave. Northlake	Ill
SHARP LABORATORIES, INC. Adv Pg 56	Box 1982, La Jolla	Cal

WINDOWS--SHIELDING

See SHIELDING--RADIATION, WINDOWS

WIRE & CABLE--RADIATION-RESISTANT

Aluminum Wire & Cable Co. Ltd.	2 St. James Sq, London SW1	Eng
Anaconda Wire & Cable Co.	36 Broadway, New York 4	NY
Brooks Corp. Scintilla Div.	Sidney	NY
Brubach Radio Co. Inc.	145 Hudson St, New York 13	NY
Bishop & Co., J., Platinum Works	Malvern	Pa
BOSTON INSULATED WIRE & CABLE CO.		
Adv Pg 246	65 Bay St. Boston	Mass
Brand, William-Rex Div. Am. Enka Corp	31 Sudbury Rd. Concord	Mass
Electric Autolite Co.	Toledo 1	Ohio
Gelpel Ltd., William, Vulcan Wks,	146/170 Bermondsey St, London, SE1,	Eng
Gourock Ropework Co. Ltd.	82 Bay St. Port Glasgow,	Scotland
Hallett Mfg. Co.	5710 Bowcroft St, Los Angeles 16	Cal
Hirchel & Sons, L. Frank	School House La, Nordstown	Pa
Phelps Dodge Copper Products Corp.	300 Park Ave, New York 22	NY
PHYSICAL SCIENCES CORP. Adv Pg 26	209 N Fair Oaks Ave, Pasadena	Cal
Radiation Applications, Inc.	29-40 27th St, Long Island City 1	NY
Raychem Corp.	Outside at Northside, Redwood City	Cal
Reuter-Stokes Electronic Components,		
Inc.	5527 Hamilton Ave. Cleveland 14	Ohio
Simplex Wire & Cable Co.	79 Sidney St. Cambridge 39	Mass
Sodern S. A.	19 rue de la Passerelle, Suresnes, Seine	Fr
Technetics Inc.	W Commercial Ave, Moonachie	NJ
U. S. STEEL CORP., Adv. Pgs. 50, 51	525 Wm. Penn Pl. Pittsburgh 30	Pa

X-RAY DIFFRACTION APPARATUS

Atlas Titanium, Ltd.	Centre St, Welland, Ont.	Can
Aluminum Corp.	860 Main St, Waltham	Mass
Dr. Vieu KG	20 Kaiserlingweg, Bonn	Ger
Engis Equipment Co.	431 S Dearborn St, Chicago	Ill
HAMPDEN ELECTRONICS CO. Adv Pg 212	Box 521, Princeton	NJ
Hilger & Watts, Ltd.	98 St. Pancras Way, London NW 1,	Eng
Jarrell-Ash Co.	26 Farwell St, Newtonville 60	Mass
Lab. Prof. Dr. R. Berthold	22 Calmbacherstr. Wilhelm Schwarzwald	Ger
Mitchell Radiation Products Corp.	E Washington St, Norristown	Pa
NERATOM, N. V., Adv Pg 112-F	Noordeinde 38, The Hague	Neth
Philips Electronic Instruments	750 S Fulton Ave, Mt. Vernon	NY
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 187	Eindhoven	Neth
Picker X-Ray Corp.	25 S Broadway, White Plains	NY
Radio Corp. of America Industrial		
Electronic Prods.	Front & Cooper Sts, Camden 2	NJ
Siemens & Halske AG	Hauptverwaltung, 80, Karlsruhe	Ger
Seifert-Schall, Ltd.	Honeypot La, Stanmore, Middx	Eng
X-Ray Dept, General Electric Co.	4855 Electric Ave, Milwaukee	Wis

X-RAY EQUIPMENT--INDUSTRIAL

See Also RADIOGRAPHIC EQUIPMENT--X-RAY

ALLIS-CHALMERS MFG. CO.,		
Adv. Pgs. 109-111	935 S 70th St. Milwaukee 1	Wis
Atomic Labs Sub. Conco	3008 Claremont Ave, Berkeley 6	Cal
CHARLESTON RUBBER CO. Adv Pg 188	7 Jenk Industrial Pk. Charleston	SC
Cenlar-Wright Corp, Princeton Div.	Box 116, Princeton	NJ
Dr. Vieu KG	20 Kaiserlingweg, Bonn	Ger
Engis Equipment Co	431 S Dearborn St, Chicago	Ill
Gamma Industrie	22 Rue de Dunkerque, Paris 9	Fr
GENERAL ELECTRIC CO. APPARATUS SALES,		
Adv. Pgs. 11, 13	1 River Rd. Schenectady 5	NY
HIGH VOLTAGE ENGINEERING CORP.		
Adv Pg 179	5 Bedford St. Burlington	Mass
Hitachi, Ltd.	1-4 Marunouchi, Chiyoda-ku, Tokyo	Jap
HUGHES AIRCRAFT CO. NUCLEONICS LAB.		
Adv Pg 280	Box 2097, Fullerton	Cal
MELLON, INC. GEORGE T.		
Adv Pg 182	132 Nassau St. New York 38	NY
Mitchell Radiation Products Corp.	E Washington St. Norristown	Pa
NERATOM, N. V., Adv Pg 112-F	Noordeinde 38, The Hague	Neth
Pantak Ltd.	Vale Rd. Windsor, Berks,	England
Philco Corp. Govt. & Ind. Gr.	4700 Wissahickon Ave, Phila 44	Pa
PHILIPS' GLOEILAMPENFABRIEKEN, N. V.		
Adv Pg 187	Eindhoven	Neth
Picker X-Ray Corp.	25 S Broadway, White Plains	NY
Pittsburgh Plate Glass Co.	632 Fort Duquesne Blvd, Pittsburgh 22	Pa
Radiation Dynamics Inc.	Westbury Industrial Pk, Westbury	NY
St. John X-Ray Laboratory	Califon	NJ
Seifert-Schall, Ltd.	Honeypot La. Stanmore, Middx	Eng
Sperry Products Co.	Shelter Rock Rd, Danbury	Conn
Victoria Associates	6311 Hanson Way, Palo Alto	Cal
X-Ray Dept, General Electric Co.	4855 Electric Ave, Milwaukee	Wis

X-RAY TUBES

See COUNTERS--X-RAY
TUBES--X-RAY

YTTRIUM

See METALS, ALLOYS & COMPOUNDS

ZINC

See METALS, ALLOYS & COMPOUNDS

ZIRCALOY, ZIRCONIUM

See FUEL ELEMENTS
METALS, ALLOYS & COMPOUNDS
PIPE & TUBING

Companies listed in the preceding Product, Material and Service Directory are listed in this section alphabetically. For each company in this section, the line in bold type gives the company name and address and telephone number of the home office or main plant. The lines in light type give local company sales offices or manufacturing representatives; these are listed in alphabetical order of territory (first states in the U.S. and then foreign territories). For foreign sales offices, the following abbreviations are used:

Arg	Argentina	Ger	Germany	Nor	Norway
Bah	Bahama	Gr	Greece	NZ	New Zealand
Bar	Barbados	Holl	Holland	Pak	Pakistan
Belg	Belgium	Ind	India	Port	Portugal
Braz	Brazil	Ire	Ireland	RP	Republic of Panama
BWI	British West Indies	Isrl	Israel	SAfr	South Africa
Can	Canada	Ital	Italy	Scot	Scotland
Col	Colombia	Jam	Jamaica	Spn	Spain
Den	Denmark	Jap	Japan	Swed	Sweden
Eng	England	Lib	Liberia	Syr	Syria
Fin	Finland	Lux	Luxembourg	Swit	Switzerland
For	Foreign	Mex	Mexico	Trin	Trinidad
Fr	France	Neth	Netherlands	Turk	Turkey
				Ven	Venezuela

TERR — MANUFACTURERS SALES/OR REPRESENTATIVES OFFICES — TEL. NO.

ABG ..... Bodden, Frankfurt, Main, Germany ..... [illegible]
Aus ABG Austria GmbH ..... Schwarzenberg-Platz 11, Wien IV ..... [illegible]
Belg Galec ..... 40 Rue Stevenaire, Brussels 5 ..... [illegible]
Den ABG Dan Elect Alt. ..... Hyvepaguie 16, Copenhagen V ..... [illegible]
Fin Sähköliikeen O. Y. ..... Annankatu 4, Helsinki ..... [illegible]
Fr Georges Joffe ..... 6 Rue de Madrid, Paris 8 ..... [illegible]
Ital Cesar Spa ..... 12 Via G. B. Pirelli, Milan ..... [illegible]
Neth N. V. Elec Maatschappij ABG ..... 22-28 Fredericplein, Amsterdam C ..... [illegible]
Nor EGA Elektro-Generator Aktieselskap ..... 11 Oves Vallgatan, Oslo ..... [illegible]
Port ABG Lusitana de Elect. S.A.R.L. ..... 12/16 Rua dos Fanqueiros ..... [illegible]
Spn ABG Iberica de Electricidad S. A. ..... 17 R. de Calvo Sotelo, Madrid ..... [illegible]
Swed Elektriska Aktiebolaget ABG ..... 21 Svartvagen, Stockholm 5 ..... [illegible]
Swit Elektrex A.G. ..... 31 Sweet, Zurich 27 ..... [illegible]

NY Picker X-Ray Corp. ..... 25 S Broadway, White Plains
Braz A E I do Brasil Ltd. ..... Rua Uruguaiana 55, Rio de Janeiro
Can A E I (Canada) Ltd. ..... 519 King St. W, Toronto 1, Ontario ..... [illegible]
Can A E I (Canada) Ltd. ..... 505 Montee de Liesse, Montreal ..... [illegible]
Can A E I (Canada) Ltd. ..... 1600 W Georgia St, Vanc. 5 BC ..... [illegible]

A.E.I. LTD. INSTRUMENTATION DIV. Cosse House, Alderyed, London WC2, Eng ..... [illegible]

AMF ATOMICS DIV. AMERICAN MACHINE & FOUNDRY CO. 140 Greenwich Ave. Greenwich, Conn ..... [illegible]
Cal American Machine & Foundry Co. ..... 7060 Hollywood Blvd. Los Angeles 28 ..... [illegible]
DC American Machine & Foundry Co. ..... 1701 K St., NW, Washington 6 ..... [illegible]
Ohio American Machine & Foundry Co. ..... 200 W 1st St. Dayton ..... [illegible]
Va American Machine & Foundry Co. ..... 1001 N Moore St. Arlington ..... [illegible]
Aus AMF Pty. (Australasia) Ltd. ..... 89-94 Bridge St. Sydney, N.S.W. ..... [illegible]
Braz AMF do Brasil S.A. Maquinas Automaticas ..... R.G. Box 7214, Sao Paulo ..... [illegible]
Eng AMF Ltd. ..... 4-6, Savile Row, London W1 ..... [illegible]
Ital AMF Overseas Corp. ..... Corso Monforte 16, Milan ..... [illegible]
Jap AMF Japan Ltd. Aoyama Dai-ichi Mansion ..... 4-11 Aizuma Aoyama-machi, Minato-ku, Tokyo ..... [illegible]
Mex Industria AMF De Mexico, S.A. ..... Morelos 110-704, Mexico, D.F. ..... [illegible]
Port AMF Overseas Corp. ..... 66 Ave. de l'Etang, Geneva ..... [illegible]

AMF ATOMICS DIV. AMF CANADA LTD. Port Hope, Ont. Can. ..... [illegible]
NY American Machine & Foundry Co. ..... 261 Madison Ave. New York ..... [illegible]
NY AMF International ..... 261 Madison Ave, New York ..... [illegible]

APN CORP. ..... 41 Russell St. Englewood, NJ ..... [illegible]
Cal Western Electronics, Inc. ..... 8407 Sepulveda Dr, Culver City ..... [illegible]
DC W. Kenneth Sparrows ..... 918 Thayer Ave. Silver Spring, Md ..... [illegible]
Fla J. Gearner Co. ..... 5216 Lincoln Rd. Miami Beach ..... [illegible]
Ill Hill & Gray, Inc. ..... 821 Garfield, Oak Park ..... [illegible]
Ind P. C. Valentine Inc. ..... 211 Ft. Wayne Bank Bldg. Ft. Wayne ..... [illegible]
Kan Pommer John Co. ..... 6800 W 63 St. Overland Park ..... [illegible]
Md Tyler Griffin Co. ..... 20 S Fairfield Rd. Devon, Pa ..... [illegible]

TERR — MANUFACTURERS SALES/OR REPRESENTATIVES OFFICES — TEL. NO.

Mass Gerber Sales Co. ..... 48 Pearl St. Brockton ..... [illegible]
NY A. Friedman Co. Inc. ..... 220 S 6th Ave. Mount Vernon ..... [illegible]
NY L. D. Allen, Inc. ..... Box 32, Salina Sta. Syracuse ..... [illegible]
NC J. Reidell Associates ..... 2000 N Tryon St. Charlotte ..... [illegible]
Can A.T.R. Armstrong, Ltd. ..... Box 58, Sta. D. Toronto, Ont ..... [illegible]

ARBE ENGINEERING CO. ..... 420 Lexington Ave. New York 17, NY ..... [illegible]
Cal J. W. Lenz Co. ..... 6600 W Jefferson Blvd. Los Angeles 16 ..... [illegible]
Cal W. H. Edie & Associates ..... 1405 Bayshore Blvd. San Francisco 24 ..... [illegible]
Ill P. Jaeger Co. ..... 1740 George Ct. Glenview ..... [illegible]
Md E. L. Hahn ..... 1701 Wyndhurst Rd. Baltimore 21 ..... [illegible]
Mass G. W. Wynne ..... 166 Washington St. Boston 35 ..... [illegible]
Mich Process Controls Co. ..... 12201 Merriman Rd. Livonia ..... [illegible]
Mo W. L. Pence Machinery Co. ..... 5000 W Pine Blvd. St. Louis 8 ..... [illegible]
Ohio R. M. Rogers Co. ..... 200 Water St. Akron 9 ..... [illegible]
Ohio P. M. Kline & Associates ..... 5406 E 82nd St. Cleveland 15 ..... [illegible]
Pa A. R. Ames Co. ..... 718 Commercial Trust Bldg. Phila 2 ..... [illegible]
Pa J. G. Griffith Co. ..... 1201 Union Trust Bldg. Pittsburgh 19 ..... [illegible]
Can Robertson Agencies, Ltd. ..... 1752-A Bayview Ave. Toronto 15, Ont ..... [illegible]

ARBEON SUPPLY CO. ..... 179-15 Jamaica Ave. Jamaica 32, NY ..... [illegible]

ABBOTT LABORATORIES ..... Box 1000, Oak Ridge, Tenn ..... [illegible]
Cal Abbott Laboratories ..... 5000 E 46th St. Los Angeles ..... [illegible]
Colo Abbott Laboratories ..... 6900 E 39th St. Denver ..... [illegible]
Fla Abbott Laboratories ..... 1202 Jacksonville ..... [illegible]
Ga Abbott Laboratories ..... 120 Peachtree Ave. Atlanta ..... [illegible]
Ill Chemical Marketing Div. ..... North Chicago ..... [illegible]
La Abbott Laboratories ..... 910 Delaida St. New Orleans ..... [illegible]
Md Abbott Laboratories ..... 2201-40th St. Baltimore ..... [illegible]
Minn Abbott Laboratories ..... 1240 LaSalle Ave. Minneapolis ..... [illegible]
Mo Abbott Laboratories ..... 340 Westport Rd. Kansas City ..... [illegible]
NJ Abbott Laboratories ..... 100 Green St. Teaneck ..... [illegible]
Ohio Abbott Laboratories ..... 1001 Dana Ave. Cincinnati ..... [illegible]
Tex Abbott Laboratories ..... 6101 Eastex Freeway, Dallas ..... [illegible]

ABRAMS INSTRUMENT CORP. ..... 600 E Shiawassee St. Lansing, Mich ..... [illegible]
Cal Instrumentation Sales, Inc. ..... 5002 Glendale Blvd. Los Angeles 42 ..... [illegible]
Colo Longmont-Smith Assoc. Inc. ..... 1053 15th St. Denver ..... [illegible]
DC F. R. Jones, Inc. ..... 6130 Beech Tree Rd. Washington 14 ..... [illegible]
Ga C. M. Sales & Associates ..... Box 3005, Atlanta 16 ..... [illegible]
Mass Robert W. Gray, Inc. ..... 672 Washington St. Wellesley 81 ..... [illegible]
Mich Product Sales ..... 501 E Grand River, E Lansing ..... [illegible]
Minn Kurt Electronics ..... 6000 Xerxes Ave. S. Minneapolis 35 ..... [illegible]
Mo Thunderbird Engineering Sales ..... 7011 Carondelet Ave. St. Louis 5 ..... [illegible]
NY Inland Systems Inc. ..... 470 Franklin St. Buffalo 2 ..... [illegible]
NY CBD Electronic Sales ..... 8 Elm Ave. Mt. Vernon ..... [illegible]
Ohio G. L. Addy Associates ..... Talbert Towers, Dayton ..... [illegible]

ACCURATE SHEET METAL & MFG. WORKS, INC. ..... 2256-64 Milwaukee Ave., Chicago 47, Ill. ..... [illegible]

TERR — MANUFACTURERS SALES/OR REPRESENTATIVES OFFICES — TEL. NO.

ACE ELECTRONICS ASSOC., INC. 99 Dover St., Somerville 44, Mass. ..... [illegible]
Cal Jackson Edwards Co. ..... 4301 Lankershim Blvd. North Hollywood ..... [illegible]
Cal F. W. Mouldings Co. ..... 970 Tenth St. San Francisco 3 ..... [illegible]
Conn Sales Sales Co. ..... Spring Valley Rd. Woodbridge ..... [illegible]
Fla D P W Engineering Co. ..... 1407 Oak Lake Drive, Clearwater
Ga J. E. Joyner & Associates, Inc. ..... Box 10021, Sta. A, Atlanta 10 ..... [illegible]
Ill Beaman & Hinson Co. ..... 4540 W Fullerton Ave. Chicago 39 ..... [illegible]
Mo Thunderbird Eng. Co. & Service ..... 7000 Carondelet Ave. St. Louis ..... [illegible]
NJ John W. Hubach ..... Route 46, Pine Brook ..... [illegible]
NY William Wall Co. ..... Box 768, Buffalo ..... [illegible]
Ohio Callaghan-Beck, Inc. ..... 7200 Lonesville Rd. Cincinnati 19 ..... [illegible]
Pa H. E. Potts Co. ..... Box 1014, Levittown ..... [illegible]
Tex V. J. Dyke: Americans, Inc. ..... 1800 Inwood Rd. Dallas 35 ..... [illegible]

ACE ENGINEERING & MACHINE CO., INC. ..... Tomlinson Rd. Huntingdon Valley, Pa ..... [illegible]
Colo Allbridge & McCabe ..... 847 E 17th Ave. Denver ..... [illegible]
DC H. W. Kenny ..... Tomlinson Rd. Huntingdon Valley, Pa ..... [illegible]
Fla Charles Parker ..... 100 E Pine St. Orlando ..... [illegible]
Ill Universal Sales & Supply, Inc. ..... 14 Industrial Rd. Addison ..... [illegible]
Kan Kenney, Inc. ..... 8407 E Kellogg St. Wichita ..... [illegible]
NY E. Kenney ..... 5277 Camelsen Ave. Wappingers ..... [illegible]
Tex Kenney, Inc. ..... 1000 W 6th St. Irving ..... [illegible]
Can David R. Burtis ..... 1015 Lawrence Ave W, Toronto, Ont. ..... [illegible]

ACHESON COLLOIDS CO. ..... 1633 Washington Ave. Port Huron, Mich ..... [illegible]
Cal C.L. Hansen ..... 2736 E Walnut St. Pasadena ..... [illegible]
Conn S. M. Hunt ..... 110 Ann St. Hartford 3 ..... [illegible]
Ill Bauer/Egloff ..... 610 N Dearborn St. Chicago 10 ..... [illegible]
Minn F. Zajac ..... 415 Roosevelt, Duluth 7 ..... [illegible]
NY W.D. Ogden Jr. ..... 107 Monroe Ave. Rochester 20 ..... [illegible]
NY F.H. Merrick ..... 111 E 1st Ave. Roselle, NJ ..... [illegible]
Ohio D.M. Crowe ..... 12020 Cedar Rd. Cleveland 6 ..... [illegible]
Ohio S. J. Jacobs ..... 3087 Spicy Rd. Cincinnati 20 ..... [illegible]
Pa M.E. Dougherty ..... 1420 Land Title Bldg. Philadelphia 10 ..... [illegible]
Pa H. J. Lang ..... 230 6th Ave. Pittsburgh 19 ..... [illegible]

ACME ELECTRIC CORP. ..... 31 Water St. Cuba, NY ..... Cuba 4
Cal K. L. Bunce ..... 17000 S Western Ave. Gardena ..... [illegible]
Conn F. Van Alstyne ..... 104 Helen St. Bridgeport, NY ..... [illegible]
Ga Hopper & McCoy ..... 976 Westside Dr. NW, Atlanta 18 ..... [illegible]
Ill Sam Ind. Prods. Inc. ..... 1040 W Lawrence Ave. Chicago 40 ..... [illegible]
Mass R. Chambers ..... 29 Brookfield St. Wellesley 81 ..... [illegible]
Mich H. McDowell ..... 17404 11 Mile Rd. Roseville ..... [illegible]
Neb W. C. McCombs ..... 324 S 84th St. Omaha ..... [illegible]
NC Rather-Ayers & Assoc. ..... 808 Greensboro St. Greensboro ..... [illegible]
Ohio Nestr-Cleveland & Assoc. Inc. ..... 24795 Detroit Ave. Cleveland 7 ..... [illegible]
Pa R. J. Donovan ..... 475 Hillside Rd. King of Prussia ..... [illegible]
Tex F. Amy ..... 4000 Parry Ave. Dallas 10 ..... [illegible]

ACME ELECTRIC HEATING CORP. 99 Reading St. Roxbury 19, Mass ..... [illegible]

ACOUSTICA ASSOCIATES, INC. 15400 Aviation Blvd. Los Angeles 45, Cal — 536-2300

ACRONAL, INC. 2351 Telegraph Rd. Detroit, Mich — EL2-4020
Cal Western Sales & Engineering — 7407 Melrose Ave. Los Angeles 46 — OL1-4000
Colo Electronic Components Co., Inc. — 1340 S Clermont St. Denver 22 — SE7-1321
Fla E. C. S. A., Inc. — Box 6116, Melbourne Beach — WA1-1700
Ill Dave Bowman Co. — 6171 E Willow Ave. Wheaton — MO9-1212
Ind Herman Associates — 941 Bellaire Ave. Rockville — MA5-7420
Mass Rockwick Eng. Sales Co. — 181 Cross St. Braintree (Boston 85) — VO9-0945
Mo Ken D. Speight Co. — 7230 W Florissant Ave. St. Louis 35 — CO1-0455
NJ John W. Hubach Co. — Room 46, Pine Brook — CA3-0800
NY Dualitite Electronics Corp. — Box 97, Fayetteville (Syracuse) — MT7-8232
Ohio Kilney-Whelan Corp. — Box 386, Chagrin Falls — CH9-4400
Pa Burke & Allman — 1377 Lancaster Ave. Devon — MU8-5170
Can Wilke Engineering & Sales Co. — 698 Richmond St. W. Toronto, Ont. — EM8-7207

ACTON LABS — 1110 Raymond Blvd. Newark 2, NJ — HE 3-4464

ADAMS CO. INC. R.P. — 475 E Park Dr. Buffalo 17, NY — TF7-3080
Cal G. L. Warden & Sons — 300 W 15th St. Los Angeles — MR-9121
Colo Commercial Equipment Co. — P.O. Box 404, Littleton — PT6-5003
Conn Conner Associates — 55 Huntington St. West Hartford — AD8-1045
Fla H. C. R. Palmer — 3000 Sea Island Dr. Ft. Lauderdale — JU3-0771
Ga Adams Sen. Inc. — P.O. 488, Decatur — 404-371-1742
Ill Ken Engineering Assoc. Inc. — 594 S Michigan Ave. Chicago 4 — WA0-5560
Mass J. Rob Jr. — P.O. Box 72, Framingham Center — TW8-9000
NJ J. R. Lippincott Co. — 36 Commerce St. Newark 2 — MB3-0042
Ohio The Gladstone Equipment Co. — P.O. Box 501, Cleveland 7 — LA1-4000
Pa F. C. Hoover — P.O. Box 401, Pittsburgh 30 — AT1-5054
Va Ken Kenmore Co. — 1406 Lead Tide Bldg. Philadelphia — LO8-0800
Tex Sgarlat Engineers, Inc. — 1012 Nueces St. Houston 1 — CA8-5071

ADAMS & WESTLAKE CO. — 1008 Michigan St. Elkhart, Ind — CY4-7141
Cal The A.W. Hub Co. — 5133 S Atlantic Blvd. Los Angeles 22 — AN8-7204
Cal The T.R. Brush Co. — 1000 California St. Burlingame — BU3-4147
Fla Dolney Associates — 616 N Orange Ave. Orlando — GA5-7472
Idaho L. C. Pelham & Co. Inc. — 594 Worcester St. Wellesley Hills 81 — CE5-0840
Idaho F. S. Hill Co. — 6130 Excelsior Blvd. Minneapolis 16 — WE9-0787
NY The Adams & Westlake Co. — 50 Church St. New York 7 — CO7-0070
NY Wally D Brush, Inc. — 5210 Bellevue Ave. Syracuse 4 — GR8-2142
Ohio L. Vosh — 4819 E 62d St. Cleveland 105 — HE1-0403
Pa R. F. Clark Co. — Lebanon & Lindberg Sts. Pittsburgh 35 — CH8-3000
Pa W Henry Conley Sales Co. — Bowley Bldg. Sels Cynwyd(Philadelphia) — MO4-3044
Wash C. B. Parsons & Co. — 6801 4th Ave. S. Seattle 8 — PA5-8700
Wis J. A. Dalbeuller, Inc. — 1023 N 3d St. Milwaukee 3 — BR6-0280

ADMIRAL CORP. — 3800 W Cortland St. Chicago 47, Ill — SP3-3000
Cal E. S. Prudenzio — 301 California Ave. Palo Alto — DA5-3301
DC J. K. Pellow — 1404 G St. NW. Washington — AD4-3004
Mass S. Friedrich — 31 Walter St. Manchester — JA9-1189
NJ R. Gilbert — 26 Maryland Ave. W Long Branch — CA3-0098
NY T. F. Carella — 812 River St. Troy — RS3-2000
Ohio F. R. Denoyer — 304 W 1st St. Dayton 2 — BA3-0000

AD-O-PLASTIC — 240 Andrey Ave., Roselleigh, NJ — HE4-4000
Cal American Safety Products Co. — 11207 Colorado Blvd. Los Angeles — HU8-0466
Conn Alsen Safety Equipment — 2 Hill St. New Haven
Fla Car-Mel Safety Equipment, Inc. — 670 N Indian Rocks Rd. Largo — JU4-1002
Mass Fab Safety Equipment, Inc. — 10 Highbrook Path, Boston Centre — BR3-0045
Mass Pine & Safety Inc. of Mass — 1000 S Broadway, Lawrence — AT9-6475
Mo Safe Equipment Co. — 1407 Tower Grove, St. Louis — JE6-2770
NY R. W. Adair Co. Inc. — Avoca — AV8337
Ohio Safety & Eng. & Appliances — 1704 Spring St. Cleveland — SU9-1133
Tenn Gaulding & Co. — 604 Donaldson St. Nashville — AL8-5301
Tex Safland Distributing Co. — 5409 Tissue Blvd. Houston — JA9-0141
Wis W. A. Vergeld Co. — 1140 Volp, Greenbay — BR3-0400
Can Safety Supply Co. — 314 King St. E. Toronto, Ont — EM8204

ADVANCED PRODUCTS CO. — 19 Broadway, North Haven, Conn — CE9-5066
Cal Market Sales — 1550 S Central Ave. Glendale 4 — CH-3903
Cal Market Sales — 255 11 St. San Francisco 3 — UN8-1400
Colo Market Sales — 310 Clayton St. Cherry Creek, Denver 6 — EM8-0001
Ga Dixie Boatings, Inc. — 1795 Monmouth Drive NW, Atlanta — JA4-1001
Ill Robert Lind — 450 Cornelia Lane, Palatine — PL8-0400
Md Smoke Sense Parking Co. — 600 N Lehigh St. Baltimore 5 — LE9-4001
Ohio Boatings, Inc. — 8400 W 117 St. Cleveland 11 — CL8-0000
Tex Associated Aircraft Supply Inc. — 6401 W Jefferson Blvd. Dallas — FE1-4001
Wash Cobbles Mfg. Co. — N 1318 Atlantic, Spokane — PA5-4013
Wash Spencer Aircraft Industries, Inc. — 8450 Dallas Ave. Seattle 8 — PA8-1011
Wis Robert Kennedy Associates — 3200 W Wells St. Milwaukee — BR4-2000
Pur Clark-Wright Corp. — 300 Dunn St. North Haven, Conn. — ATS-1000

ADVANCED TECHNOLOGY LABS. — 369 Winters Rd. Mountain View, Cal — YU8-4451
Cal Sandow & Sandow — 10000 Culbert St. Seattle — SE3-0000
Idaho J. M. Devine Co. — 1100 Beacon St. Brookline Highlands 46 — BA4-1165
NY Fabian-Schmitt — 420 Hudson Blvd. Great Neck — HU7-1110
Tex R. R. Clarke Co. — Box 10001, Houston 10 — JA8-4000

AD-TO ELECTRONICS LAB. INC. — 240 Tuckahoe Ave. Passaic, NJ — GR3-5407
Cal C. A. Dunn Assoc. — 6071 National Blvd. Los Angeles 34 — UP0-7771
Cal Fairlands Assoc. — 1345 Hancock St. Redwood City — EM8-1200
Minn Sunshine & Co. — 0 Prospect St. Waltham 54 — TW4-0071
Mich Gates Engineering — 1474 E Outer Dr. Detroit 36 — FO8-0000
Mo Gates Flower Engineering Co. — 6140 Gardner Ave. St. Louis 30 — PA8-0000
NJ J. Williams Assoc. — 00 Main St. Orange — OR6-7100
Ohio Gates Engg. — 19000 Bruce Dr. Wickwick (Cleveland) — WE9-0101
Ore Hawthorne Electronics — 916 N Hawthorne Blvd. Portland — WA-4876
Tex Industrial Assoc. Electronics — 1211 Farrington St. Dallas
Wash Hawthorne Electronics — Boeing Field, Seattle — PA5-1400

AERALITE, LTD. CASTLE WKS. Sedgebridge, Cheshire, Eng — ST2222/0
Eng Aerolite, Ltd. — 11-12 Paddington Green, London, W 2

Eng Aerolite Ltd. — Portland Sq. Bristol, Glouc.
Eng Aerolite, Ltd. — 266 Deansgate, Manchester, 3
Eng Aerolite, Ltd. — 240 Bow St. Hockley, Birm.
Eng Aerolite, Ltd. — Surgery Bank, Newcastle On Tyne
Scot Aerolite, Ltd. — 311 Bell St. Glasgow, C 4

AERO-FLOW DYNAMICS, INC. Conn, Pa — 3-0263
Cal Aero-Flow Dynamics, Inc. — 1600 Flower St. Glendale 1 — CH5-0001
Conn Aero-Flow Dynamics, Inc. — Box 84, Shelton — HA-8100
Kan Aero-Flow Dynamics, Inc. — 1300 Airport Rd. Wichita — WH8-1061
NJ Aero-Flow Dynamics, Inc. — Box 587, Lawrence — TR3-1300
Ohio Aero-Flow Dynamics, Inc. — 8000 Fox Hills Ave. Dayton 10 — 000-0173

AERO RESEARCH INSTRUMENT CO. INC. 135 N Sheridan St. Chicago 7, Ill — TA4-4400
Cal Cermet & Assoc. — 110 Cypress St. Redwood City
Cal A. C. Cotland Company — 4040 Van Nuys Blvd. Sherman Oaks — ST5-4040
Fla Col-Ins. Inc. — 0700 Precision Dr. Orlando
Ind Fluter Instrument Co. — 1000 Hillside Ave. Hammond
Mo Main Equipment Co. — 10000 Clayton Rd. St. Louis
Mex Smoke-Pouge & Assoc. — 6010 Domingo Rd. NE, Albuquerque
NY Cass Electric Corp. — 1044 Broadway, Albany
Ohio Kilney-Whelan Corp. — 10 Main St. Chagrin Falls
Ohio Kilney-Whelan Corp. — 5001 Fox Hills Ave. Dayton
Pa Test Equipment Sales Co. — 4447 N Broline St. Philadelphia 40
Tex Instrumatic Inc. — 910 Boundary, Houston — CA8-0060
Wash R.C. Porter Co. — 2300 Poplar Pl. Seattle 44

AEROJET-GENERAL NUCLEONICS Box 77, San Ramon, Cal — VE7-3511
Ala Aerojet-General Corp. — 6525 Memorial Pkwy. NW, Huntsville — HS-0200
Cal Aerojet-General Corp. — 000 N Sepulveda Blvd. El Segundo — OR9-7147
Cal Aerojet-General Corp. — 43021 N Sierra Hwy. Lancaster — WH8-4535
Cal Aerojet-General Corp. — 6352 Irwindale Ave. Azusa — EM4-0211
Cal Aerojet-General Corp. — 6352 Irwindale Ave. Azusa — CO3-6111
Colo D. E. Snyder — 000 N Sepulveda Blvd. El Segundo — OR9-7147
DC Aerojet-General Corp. — 1150 Conn Ave. NW, Washington — FE7-5000
Minn AGC c/o General Tire & Rubber Co. 15105 N E Mile Rd. Detroit — VO8-7200
NY Aerojet-General Corp. — 000 Old Country Rd. Garden City — PT7-0050
Ohio Aerojet-General Corp. — 940 W 1st St. Dayton — BA4-3532
Wash Aerojet-General Corp. — Box 3707, Seattle — JU3-0340
Eng Sir Alwyn Crow — 130 Mortlock Ct. London SW, 1 — GR6600

AEROJUP (CANADA) LTD. — 207 Bridgehead Ave. Toronto 19, Ont. Can — BU1-3203

AEROJUP CORP. — 300 S East Ave. Jackson, Mich — ST3-2385
Cal Aerojuip Corp. — 11214 Exposition Blvd. Los Angeles 64 — GR8-0021
Cal Aircraft Div. Wesner-Tiner — 3010 Wilson Ave. Burbank
Del J. Goodwin — Box 1125, Wilmington
Ga J. Harlow — 460 Hickory Dr. Marietta — 74001
Mich W. Connelly — 10700 E Warren, Detroit 24 — TU4-0460
Mo D. Hardin — 1140 S Rock Hill Rd. Webster Groves — WO2-7720
NJ T. Neale — 420 Hickory St. Westwood — NO4-3207
NJ H. Irwin — 14 Cedar Tree Ln. Sparta — PA5-0207
Ohio Aerojuip Corp. — 1410 Acors Dr. Dayton 19 — AJ3-4004
Pa M. Cadoo — 141 E 3d St. Media — LO9-0200
Tex Aerojuip Corp. — 6101 Sovereign Row, Dallas — FL7-0301
Wash R. Luther — 10011 Rainier Ave. Seattle 98 — PA5-0040

AEROJUP-MARMAN DIV. — 11214 Exposition Blvd. LA 64, Cal — GR8-0021
Ala G.R. Barnard — 3100 Martin Rd. Birmingham 8 — TR8-0400
Ariz L. W. Pickens — 5411 W Orchid Ln. Phoenix — WO-0001
Cal R. Tudor — 3300 N Harbor Dr. San Diego — CY3-0577
Cal R. Lee — 8 Foothill Park Terrace, Lafayette — TD4-1120
Ill E.A. Brem — 1000 Homestead Rd. LaGrange Park — FL3-0047
Ill J. R. Penery — 2700 S Central Ave. Chicago 48 — MU3-2040
Ind F.B. Stewart — 6100 Carrollton, Indianapolis 20 — CL1-0000
Mich W.P. Connelly — 10700 E Warren, Detroit 24 — TU4-0460
NJ E.C. Winfield — 921 E Glen Ave. Ridgewood — GE-0000
NY W.J. Tomblin — Box 57, Lindenhurst — TU8-0000
Tex W.J. Gates — 3000 A W Berry, Fort Worth — WA3-0000
Wash J. Pellerzoni — Box 78, Mercer Island Sta. — AD8-6440

AERTEC MINETRIES, INC., CONTROL EQUIPMENT DIV. — Conly Ave. Greenwich, Conn — JE1-8-00
Cal Aertec Industries, Inc. of Cal — 4300 Sepulveda, Culver City
Fla Thermix of Florida — Box 40-1207, Miami

AEROFOX CORP. — 240 Bellerville Ave. New Bedford, Mass — YU4-9000
Cal Meyer & Son — 133 10th St. San Francisco 3 — LA3-0000
Cal A.J. Hoel — 0417 Las Tunas Dr. San Gabriel — CU8-7034
Fla K.K. Wallace Associates, Inc. — Box 45, Gata — WE9-0343
Ill Ellinger Sales Corp. — 0040 Northwest Hwy. Chicago 32 — RO8-1570
La R.E. Moore Co. — 0004 Louisville St. New Orleans 24 — BU8-3407
Mass Carter Sales Co. — 40 Pond St. Brookline 46 — BR8-3400
Mich R. Mills Co. — 10071 Jones Commis Hwy. Detroit 35 — UN8-0000
Minn P.R. Hill Co. — 6130 Excelsior Blvd. Minneapolis 16 — WE9-0787
NJ Sinkerhoff Sales Co. — 170 Oakwood Ave. Orange — OR4-4300
NM R.E. McClendon Co. — 616 Yale Blvd. SE, Albuquerque — CE3-6661
Tex H. Lieberman & Associates, Inc. — 6006 Northwood Rd. Dallas 35 — EM3-0402
Wash D. Smith Sales Co. — 3200 N 46th St. Seattle 3 — ME3-3100

AETRON DIV. AEROJET - GENERAL CORP. — 410 N Citrus Ave. Covina, Cal — EM4-0211
Ala Aerojet-General Corp. — 6525 Memorial Pkwy. Huntsville — HS-2136
Cal Aerojet-General Corp. — 43021 N Sierra Hwy. Lancaster — WH8-4535
Cal Aerojet-General Corp. — 000 N Sepulveda Blvd. El Segundo — OR9-7147
DC Aerojet-General Corp. — 1150 Connecticut Ave. NW, Washington 6 — FE7-5000
Mich Aerojet-General Corp. — 10300 W 8 Mile Rd. Detroit — VE8-0700
NY Aerojet-General Corp. — 000 Old Country Rd. Garden City — PT7-0050
Ohio Aerojet-General Corp. — 940 W 1st St. Dayton — BA4-3532
Wash Aerojet-General Corp. — c/o Boeing, Box 3707, Seattle 94 — JU3-3340

AEROWORTH & SONS, INC., WM. — 2101 Lawrence St. Denver 5, Colo — AL5-1723
Ill R. Bartlett — 3207 Halsted St. Sugar — HA5-5117
NJ H. Volpe — 8 Lakeview Ave. Boonton — DE4-0000

AIR CONTROL, INC. — 400 Hudson Ave. Hudson, Fla — HO4-4300
Cal Tech-Air, Inc. — 3644 Wilshire Blvd. Los Angeles 4 — DU6-0063
Ill Maitland Distributing Co. — 6000 Lincoln Ave. Chicago 45 — OR6-1100
Mass C. T. Morgan Co., Inc. — 81 Lodge St. Beverly — MA5-0090
NJ The F. V. Hamshere Co. — 340 Bloomfield Ave. Clifton — GR6-2100
NY L. D. Allen, Inc. — Box 88, Salina Sta. Syracuse 8 — GR2-0100

AIR CONTROLS, INC. — 2310 Superior Ave. Cleveland 14, Ohio — PR3-3000

AIR MARINE MOTORS INC. — 300 Bay View Ave., Amityville, NY — AM4-5700
Ariz R. S. "Bo" Nelson — 1000 E Cambridge St. Phoenix — AM8-0514
Colo Electronic Components Sales, Inc. — 1340 S Clermont St. Denver — SK7-1321
Ga V. A. McCurvey Co. — 315 Church St. Decatur — DR7-6167
Ill R. C. Whitmore & Associates — 000 N Michigan Ave. Chicago — MO4-1004
Kan Haigin Sales Co. — 1030 Hall, Manhattan — RA3-3441
Mass Cirella, LeBlanc Sales — 005 Main St. Waltham — TW3-2742
Minn Anderson & Associates — 3030 York Ave. N. Minneapolis — JO8-3333
NJ W. Sutton & Co. — 000 Bergen Ave. Jersey City — WO3-0205
NY M. P. Andrews, Inc. — 319 Mott St. Fayetteville — MT7-6405
Ohio G & H Sales Co. Inc. — Box 436, Cincinnati — JE1-0553
Tex Campion Sales Co. — 3000 Chancellor Ave. Dallas 36 — EU7-0000
Wash F. H. Haight Co. — 3033 E Lake Ave. Seattle 1 — EA1810

AIR REDUCTION CO., INC. — 150 E 42 St. New York 17, NY — MU2-5700
Ala Air Reduction Sales Co. — 104 S 18th St. Birmingham — FA5-4444
Cal Air Reduction Pacific Co. — 3661 Lennox Blvd. Venice — LO7-0141
Cal Air Reduction Pacific Co. — 1405 Park Ave. Emeryville — OL5-4100
Cal Air Reduction Pacific Co. — 100 California St. San Francisco — YU1-1440
Ill Air Reduction Sales Co. — 5000 S Hamon Ave. Chicago — RT-0100
Mass Air Reduction Sales Co. — 220 Mt. Vernon St. Ophem's Corner — GR6-2010
Minn Air Reduction Sales Co. — 3424 University Ave. SE, Minneapolis — FR8-7311
NJ Air Reduction Sales Co. — 132 Pacific Ave. Jersey City — DE3-7140
Ore Air Reduction Pacific Co. — 1303 NW Kearney St. Portland — CA6-0271
Pa Air Reduction Sales Co. — 17th St. & Allegheny Ave. Philadelphia — BA5-5000
Tex Air Reduction Sales Co. — 401 Warren School Rd. Arlington — CH5-3046
Wash Air Reduction Pacific Co. — 5000 S Marginal Way, Seattle — MA5-3300

AIR & REFRIGERATION CORP. — 420 Madison Ave. New York 17, NY — PL 1-0000
Cal Ness, Greiner & Pollard — 3440 Sunset Blvd. Los Angeles 39 — HO8-3044
Colo cha Company — 1400 Hoyt St. Denver — BF1-4401
Ill Albert O. Leapley — 1140 Chicago Ave. Oak Park — EU6-3400
Ky Technical Prods. Service & Sales — Box 1105, Louisville — TU6-0000
NM Air Equipment Co. — Box 6166, Albuquerque — CE3-0400
NY Air-Pak Products, Inc. — 435 Lexington Ave. New York — MU7-1000
Ohio Mecco Equipment Co. — 1547 E 10th St. Cleveland 14 — MA1-0000
Pa Dauch Co. — 4007 Penn Ave. Pittsburgh 24 — EM2-0000
Pa Dom Industrial Equipment Co. — 1303 W Chester Pike, Havertown — EU9-4036
Tenn Vernon S Tupper Co. — Box 1108, Nashville — AL4-0500
Tex H.O. Kamp & Co. — 3015 South St. Dallas 4 — EU7-7006
Wash Earl H Norby Co. — 804 Skinner Bldg. Seattle — MA6-3040

AIR-VAC ENGINEERING CO. INC. — 100 Gulf St. Milford, Conn

AIRBORNE ACCESSORIES CORP. — 1414 Chestnut Ave. Hillside 5, NJ — HU8-0250
Ariz Western Engineering Co. — 0000 N 17th Ave. Phoenix — WA4-0021
Cal Airborne Accessories Corp. — 5400 W Washington Blvd. Los Angeles 16, — WE8-3237
Cal Cubbin-Tipton & Associates — 3270 Sunacres St. San Diego 10 — AC3-0450
Cal The Hollis Jewell Co. — 6033 W Washington Blvd. Los Angeles 16 — WE3-7200
Cal L. A. Hurt & Co. — 1001 Howard St. San Francisco — HU1-4700
Ga Assment — 3000 Peach Tree Rd. NE, Atlanta 5 — CE3-3520
Mass General Measurements Co. Inc. — 1300 Beacon St. Brookline Highlands — WO8-0150
Minn P. R. Dungan Co., Inc. — 00 Huntington Ave. Boston 10 — CO6-7700
Mich Willard Spencer Co. — 10040 Livernois Ave. Detroit 21 — TE0-5300
Tex Airborne Accessories Corp. — 2700 W Mockingbird Ln. Dallas 35 — FL5-0000
Wash Hall Engineering Co. — 1400-120th St. NE, Bellevue — GL4-0511
Can Winnet Boyd Ltd. — 705 Mt. Pleasant Rd. Toronto 7, Ont. — HU1-3733

AIRCRAFT EQUIP. TESTING CO. INC. — 2115-29 Kirkwood Ave. Baltimore 23, Md
Conn Connecticut Sales Engineering Co. — 197 Thompson St. New Haven — LO5-5001
NC Progressive Devices — 801 N Miller St. Greer, SC — TR1-4010

AIRCRAFT & AIRFLE COMBA PARTS 2212 Kingsley Ave. Hawthorne Branch, Cal PO4-4420

AIRCRAFT PUMPS-ARMA INC. Glen Cove, NY
Cal Robly Engineering Co. — 3140 Westwood Blvd. Los Angeles 25 — GR7-0704
Colo L. Dorland — 1400 Milwaukee St. Denver — PL5-7710
Conn Northeast Sales Eng. — 2013 Dixwell Ave. Hamden — CH9-4401
Fla Russell Associates, Inc. — 00 S Palmetto, Winter Park
Ga Russell Associates, Inc. — 3170 Maple Dr. Atlanta 5 — CE7-4700
Kan D & O Engineering Co. — 1030 E Harry St. Wichita — AM3-0214
Md Russell Associates, Inc. — 610 Virginia Ave. Baltimore 4 — VA3-2000
Mich Russell Associates, Inc. — 10071 Jones Commis Hwy. Detroit 35 — VE7-1000
NY Russell Associates, Inc. — 1000 Niagara Falls Blvd. Tonawanda — AT4740
NY Russell Associates, Inc. — 105 Orinoco Dr. Brightwaters — MO6-0000
Ohio Russell Associates, Inc. — 4 Davis St. Cincinnati 10 — WE1-0000
Wash The Thrum Co. — 1707 16th Ave. S. Seattle 44 — EA5-0000

AIRFLOW CO — 400 S Stonestreet Ave., Rockville, Md — SA4-0166
Ala G. Gilliam — 7004 Memorial Pkwy. Huntsville — HS-0204
Cal Pneumco, Inc. — 5640 Valley Blvd. Los Angeles 64
Cal Pneumco, Inc. — 2400 Lincoln Ave. Alameda
Conn S. W. Gray, Inc. — 47 DeForest St. Waterbury — CE4-2000
Idaho S. W. Gray, Inc. — 072 Washington St. Wellesley 81 — CE5-0000

AIRMATIC SYSTEMS CORP. — 447 Market St. Saddle Brook, NJ — HO 9-0000
Ill Airmatic Systems Corp. — 4075 Lincoln Ave. Chicago 48 — LO1-3440
Md Airmatic Systems Corp. — 5400 Gallatin St. Hyattsville — UN4-3700
Mo Airmatic Systems Corp. — 2301-4 Grand Ave. Kansas City 8 — VE-0500
Tenn R.E. Coleman & Associates — Box 9005, Memphis 17 — JA5-1031
Tex P.E. Ware Co. — 8000 S Hampton Rd. Dallas 30 — FE7-1321
Tex Davis Equipment Co. — 1404 Danbury St. Houston 19 — JA5-5111
Can Kip Kelly, Ltd. — 00 Higgins Ave. Winnipeg 3, Man. — WH5-3007

ARMATIC VALVE, INC. ..... 7313 Associate Ave. Cleveland 9, Ohio HU1-2520
Cal Marshall Tool & Supply Corp. ..... 5950 E Olympic Blvd. Los Angeles AN5-5131
Ga Stasco Supply Co. ..... 455 Piedmont Ave. Atlanta 8 ..... TR5-5971
Mass Schurter-Young Corp. ..... 5 Cliff St. Beverly WA5-0131
Mich Con Sales & Engr'g Co. ..... 5950 E Coolidge Ave. Detroit 7 ..... WA5-0787
NY Engdar Controls, Inc. ..... Box 81, Sta. H, Buffalo 14 ..... TF6-8142
NY Acorde Sales Co., Inc. ..... 270 Fifth Ave. New York 16 ..... OR9-5191
Ohio Wyatt Sales Corp. ..... 11005 Wilkinson Ave. Cleveland 7 ..... AC1-7800
Tex Snyder Co., Inc. ..... 11425 Todd St. Houston 24 ..... OV8-5747
Wash Standard Equipment Sales ..... 8001 Airport Way, Seattle 8 ..... PA5-8136

ARMIC, LTD. ..... High Wycombe, Bucks. Eng HW2591
NY Electronic & TV Consultants ..... Box 47, Hightstown Sta. New York 52

ARPAX ELECTRONICS INC.
CAMBRIDGE DIV. ..... Cambridge, Md ACR-4800
DECCO DIV. ..... Van Nuys, Cal ST3-0962
SEMINOLE DIV. ..... Ft. Lauderdale, Fla LE3-4168
Cal Arpax Electronics Inc. of Cal. ..... 14727 Arminta St. Van Nuys ST3-9100
Colo Vinson Associates ..... 5690 S Lincoln, Englewood SU6-2303
Kan G. E. Harris & Co., Inc. ..... 5422 E Douglas Ave. Wichita 8 ..... MU5-2101
Md Arpax Electronics Inc. ..... 8133 Fenton St. Silver Spring JU5-4322
Mass Drew Associates, Inc. ..... Box 467, Bedford CR4-7300
Mich Tam Enterprises, Inc. ..... 18257 Meyers Rd. Detroit UN3-0965
NY J. Dillard Associates, Inc. ..... 90 Main St. Port Washington PO7-0475
NY Midtown Research Sales Inc. ..... 509 Wellesley Rd. Syracuse 7 ..... GR8-4541
NC J. L. Highsmith & Co. ..... 3730 Monroe Rd. Charlotte FF7-5546
Ohio Technical Associates, Inc. ..... 4475 Lander Rd. Chagrin Falls TU3-9854
Can Leonard Electric, Ltd. ..... 1600 Sauguiro Rd. San Cecilia, Ontario 579-9434

ALCAR INSTRUMENTS, INC. ..... 451 Robbins Ave. Trenton 5, NJ TU2-2900

ALCO PRODUCTS, INC. ..... Box 1001, Schenectady 5, NY FR7-2211
Cal Alco Products, Inc. ..... 6200 Canoga, Los Angeles 35 ..... BA3-4007
Cal Alco Products, Inc. ..... 255 Montgomery St. San Francisco DO8-7202
DC Alco Products, Inc. ..... 910 17th St. NW, Washington 6 ..... DF7-6344
Ill Alco Products, Inc. ..... 540 McCormick Bldg. Chicago 4 ..... WA3-8324
Mo Alco Products, Inc. ..... 4040 Bingham Ave. St. Louis 18 ..... PL1-8830
NY Alco Products, Inc. ..... 500 6th Ave. New York 36 ..... YU6-5000
Ohio Alco Products, Inc. ..... Tower Bldg. Cleveland 15 ..... CE1-1505
Pa Alco Products, Inc. ..... 1617 Pennsylvania Blvd. Phila 8 ..... LO4-2225
Pa Alco Products, Inc. ..... 970 Cheyenne St. Pittsburgh 28 ..... WA2-6800
Tex Alco Products, Inc. ..... Bank of Southwest Bldg. Houston CA3-6976

ALDEN ELECTRONIC & IMPULSE RECORDING DEVP. CO. ..... Westboro, Mass PR6-4467

ALDERSON RESEARCH LABS. INC. 40-14 10 St. Long Island City 1, NY EH5-8855
Cal Alderson Research Labs., Inc. ..... 1040 Gorth Ave. Los Angeles 24 ..... BR4-5115
Aust M. Ramsay (Surgical) Limited ..... 330 Swanston St. Melbourne, C.1. Victoria
Den H. Hansen Chemicals Lab. ..... 80 Gimlegade, Copenhagen K
Fr A. Joly ..... 10 rue de Petit-Chateau, Clamarts Seine
Gb Continental Distributors, Ltd. ..... 131 Park Court Road, London S.W.5
Ital Cine Italiana Commercio Estero ..... Via Umbria 7, Roma
Jap American Commercial ..... 535 Fifth Ave. New York, N Y
Mex Harlaxe, S. A. ..... Melchor Ocampo 469, Mexico 5, D. F.
Port J. C. Mendes ..... Ave da Republica, 6, 2 E, Lisboa
Sp Onsko, S. A. ..... Prim, 4, Madrid
Turk Dr. Mehmet Vecfi ..... Box 148, Istanbul

ALEXANDER VACUUM RESEARCH INC. 200 Andrews Ave. New York 17, NY MU5-8939

ALFAX PAPER & DISPENSING CO. Box 128, Waltham, Mass PG6-4467

ALITE DIV., U.S. STONEWARE CO.
Box 110, Zanesville, Ohio MO4-2271
Cal U. S. Stoneware Co. ..... 510 Wilshire Blvd. Anaheim PE5-0180
Ill U. S. Stoneware Co. ..... 1310 N Harlem Ave. Oak Park AU9-1811
NY U. S. Stoneware Co. ..... 40 E 42nd St. New York 17 ..... MU2-4277
Tex U. S. Stoneware Co. ..... 3021 Richmond Ave. Houston 6 ..... JA4-5900

ALLEGHENY LUDLUM STEEL CORP. Oliver Bldg. Pittsburgh 22, Pa CO1-4300

ALLEN-BRADLEY CO. ..... 136 W Greenfield Ave. Milwaukee 4, Wis OR1-2600

ALLEN SONS & CO. LTD., W.H. Queens Cap. Wks. Bedford, Eng 47400

ALLEVARD-SIMM ..... 13 rue de Bruley, Paris 6, Fr DUR9-18
Cal Mechanic Products Co. ..... 5120 E 12th St. Los Angeles

ALLIED CONTROL CO., INC. ..... 2 East End Ave. New York 21, NY
Cal Western Coastal Equipment Co. ..... 14015 Vermon Blvd. Gardena Calif ST9-1505
Fla W. S. Lehmann Co. ..... Box 1224, Orlando GA5-5848
Ill R.M. Kemper Co. ..... 4900 N Harlem, Chicago 31 ..... UN7-7200
Ind Morris-Cunningham & Associates ..... 6900 N College Ave. Indianapolis 20 ..... CL1-8825
Mass Mandenaid-Wadman Co. ..... 1313 Chestnut St. Newton Upper Falls WO6-0900
Minn S.M. Mitchell ..... 5500 Brooklyn Blvd. Minneapolis 10 ..... WE9-0471
Mo Pentzel-Young Sales Co. ..... 4000 Broadway, Kansas City 12 ..... VA1-5900
NY L.D. Allen, Inc. ..... Box 22, Solvay Sta. Syracuse 5 ..... GR1-2100
Ohio A. C. Weld & Associates, Inc. ..... Box 18219, Cincinnati 16 ..... VA1-0970
Pa C.R. Hile Co. ..... 17 S Valley Rd. Paoli HA4-2000
Tex Southern Ind. Electronics, Inc. ..... Box 35025, Dallas 35 ..... EM-5177
Wash D. Smith Sales Co. ..... 5900 N 40th St. Seattle 5 ..... MU3-5189

ALLIED ENGINEERING & PRODUCTION CORP. ..... 3021 Stanley Ave. Alameda, Cal LA2-1880

ALLIED LEAD CONSTRUCTION CO. 6600 S Chicago Ave., Chicago, Ill FA4-2700
Ky Allied Lead Const. Co. Inc. ..... 210 Main St. Covington 1
Mich Allied Lead Const. Co. Inc. ..... 8804 Holmes Ave. Detroit 19

ALLIED PLASTICS SUPPLY CORP.
75 Cliff St. New York 38, NY BE3-7077
NJ Allied Plastics Supply Corp. of NJ ..... 610 Devine Ave. Elizabeth EL4-3660

ALLIED RESEARCH ASSOCIATES INC. 43 Leon St. Boston 15, Mass GA7-3434
DC Allied Research Assoc. Inc. ..... 1035 K St. NW, Wash MT-2135

ALLIED RESINOUS PRODUCTS, INC. Vinney Rd & Clark St. Cincinnati, Ohio 399-0001

ALLIS CO., LOUIS ..... 427 E Stewart St. Milwaukee 7, Wis.
Cal The L. Allis Co. ..... 1070 Bellina Rd. Burlingame 342-4800
Ill The L. Allis Co. ..... 6600 Stoney Ave. Chicago HA2-7700
Kan The L. Allis Co. ..... 5100 S Seneca, Wichita 13 ..... LY1-6600
Mich The L. Allis Co. ..... 17700 W 8 Mile Rd. Southfield 46-5000
Mo The L. Allis Co. ..... 4000 Delmar Blvd. St. Louis 8 ..... PO1-5000
NJ The L. Allis Co. ..... 514 Dodd St. East Orange OR6-8100
Ohio The L. Allis Co. ..... 5000 Vinney Pkwy. Cincinnati EM1-1120
Ohio The L. Allis Co. ..... 17700 W 8 Mile Rd. Southfield, Mich. 46-5000
Ore The L. Allis Co. ..... 2035 SW 58th Ave. Portland 1 ..... CA3-0400
Pa The L. Allis Co. ..... 4336 Brownsville Rd. Pittsburgh TO4-6300
Tenn The L. Allis Co. ..... 134 W Church Ave. Knoxville HO-3145

ALLIS-CHALMERS MFG. CO. ..... 900 S 70th St. Milwaukee 1, Wis. SP4-2600
Cal Allis-Chalmers Mfg. Co. ..... 680 Harrison St. San Francisco 7 ..... DO3-5904
Colo Allis-Chalmers Mfg. Co. ..... 650 Broadway Bldg. Denver 8 ..... CH6-5502
DC Allis-Chalmers Mfg. Co. ..... 600 Kennedy St. NW, Washington 11 ..... TU2-0600
Ga Allis-Chalmers Mfg. Co. ..... 87 Forsyth St. NW, Atlanta 3 ..... JA5-7116
Ill Allis-Chalmers Mfg. Co. ..... 135 S LaSalle St. Chicago 3 ..... FR5-0400
Mo Allis-Chalmers Mfg. Co. ..... 7022 Bodemann Ave. St. Louis 6 ..... PA8-5454
NY Allis-Chalmers Mfg. Co. ..... 140 Church St. New York 7 ..... BO-8150
Ohio Allis-Chalmers Mfg. Co. ..... 1717 E 9th St. Cleveland 14 ..... MA1-5400
Pa Allis-Chalmers Mfg. Co. ..... 1617 Pa. Blvd. Philadelphia 3 ..... LO3-9433
Tex Allis-Chalmers Mfg. Co. ..... 1500 Mercer St. Dallas 3 ..... RE-7344

ALLISON DIV. GEN. MOTORS CORP. Box 894, Indianapolis, Ind
Cal G. C. Pearce ..... 9477 Brighton Way, Beverly Hills BR3-7700
DC K. I. Bigelow ..... 1025 Vta St. NW, Washington 6 ..... EX3-1130
Ohio G. F. Brewer ..... 534 N Wilkinson, Dayton BA5-1600

ALLOY FLANGE & FITTING CORP.
39-30 Review Ave. LIC 1, NY EH5-8896

ALLOY STEEL PRODUCTS CO. 1500 N Elizabeth Ave. Linden, NJ WA5-4400
Ala Alloy Steel Products Co. ..... 1025 19th Ave. S. Birmingham 5 ..... TA5-0821
Cal Alloy Steel Products Co. ..... 24 California St. San Francisco YU5-0100
Cal Alloy Steel Products Co. ..... 6400 Beverly Blvd. Los Angeles 36 ..... BA3-4200
Del Alloy Steel Products Co. ..... 100 W 6th St. Wilmington OL3-4177
Ga Alloy Steel Products Co. ..... 90 4th St. NW, Atlanta TW-4003
La Alloy Steel Products Co. ..... 6100 Pontiac Blvd. Baton Rouge 8 ..... WA4-2202
Mass Alloy Steel Products Co. ..... 470 Atlantic Ave. Boston 10 ..... HA6-4040
Mo Alloy Steel Products Co. ..... 11001 Manchester, St. Louis 31 ..... TO5-5770
NY Alloy Steel Products Co. ..... 2600 Main St. Buffalo 14 ..... AT4600
NY Alloy Steel Products Co. ..... 350 5th Ave. New York LO5-0040
Pa Alloy Steel Products Co. ..... 2701 Brownsville Rd. Pittsburgh 27 ..... TU5-0001
Wash Alloy Steel Products Co. ..... 1001 2nd Ave. Seattle MU2-4400

ALLOYS RESEARCH & MFG. CORP. 34-32 57 St. Woodside 77, NY ILS-3440

ALLOYS UNLIMITED INC. ..... 71-01 43rd Ave., LIC 1, NY

ALL-STATE WELDING ALLOYS CO. INC.
Box 228, White Plains, NY WH8-4646
Ala Alabama Oxygen Co. ..... 2600 Vandalusia Rd. Birmingham
Cal All-State Welding Alloys Co. Inc. ..... 4054 Firestone Blvd. South Gate LO7-2200
Ga Welding Supply & Service Co. ..... 384 Technical Dr. NW, Atlanta
Haw Welding & Industrial Prod. Ltd. ..... 1370 Makaloa St. Honolulu
Ill Kirk-Wilhard Co. ..... 540 E 103rd St. Chicago 28
Mass Brewster Welding Supply Co. ..... 181 Sidney St. Cambridge
Mich Welding Equipment & Supply Co. ..... 2005 E Davison Ave. Detroit 10
Mo Midwest Tool & Supply ..... 1315 N Broadway, St. Louis
Tenn Delta Oxygen Co. ..... 611 Court Ave. Memphis
Tex Alloy Weld Supply Co. ..... 1901 N Wayside Ave. S. Houston
Tex Weldon Supply Co. ..... 400 S Industrial Blvd. Dallas
Can All-State Welding Alloys-Canital ..... 141 Kipling Ave. S. Toronto 18 ..... HU-0801

ALLSTATES DESIGN & DEV. CO. INC. 25 N Wacker St. Trenton, NJ EX5-0200
Fla Allstates Design & Dev. Co. Inc. ..... 300 N Orange Ave. Orlando CH1-0300
Mass Allstates Design & Dev. Co. Inc. ..... 976 Boylston St. Boston CO6-0300
NJ Allstates Design & Dev. Co. Inc. ..... Hwy 10, E Hanover TO7-0041
NY Allstates Design & Dev. Co. Inc. ..... 5000 Jones St. Syracuse HO9-0191
NY Allstates Design & Dev. Co. Inc. ..... 35 Maplewood Ave. Albany 8 ..... IV3-0007
Ohio Allstates Design & Dev. Co. Inc. ..... 6400 Kennedy Ave. Cincinnati HU-7314
Pa Allstates Design & Dev. Co. Inc. ..... 3413 Clairton Blvd. Pittsburgh TU3-0140
Wis Allstates Design & Dev. Co. Inc. ..... 300 E Michigan St. Milwaukee BR6-0900

ALPHA METALS, INC. ..... 60 E Water St. Jersey City 4, NJ HE4-0770
Cal Alpha Metals Inc. ..... 2540 Seybrook Ave. Los Angeles RA3-0044
Fla H. B. Gow & Co. ..... 610 Riverside Dr. Ormond Beach OR7-0750
Ill Alpha Ley Corp. ..... 5050 S Lumber St. Chicago MO6-1000
Mass D. A. Fitz Gerald ..... 72 Greenfield Ln. Scituate LI5-2700
Mich J. Zaiser ..... 51 Sterling Ave. Highland HU7-4000
NY J. Kennedy ..... 32 Maywood Dr. Tonawanda LU8881
Pa G. Pessel ..... 441 Elm St. Philadelphia CH7-7000
Tex P. J. Scanlon Co. ..... 1000 Inwood Rd. Dallas FL1-0001

ALPHA MOLYKOTE CORP. ..... 65 Harvard Ave. Stamford, Conn FR-5754
Ala Standard Oil Co. Kentucky ..... Birmingham FA4-9001
Cal Shell Supp. & Supply Co. ..... 1200 S Central Ave. Glendale 4 ..... CR6-5011
Cal Shell Supp. & Supply Co. ..... 955 12th St. San Francisco 9 ..... UN8-1400
Fla Standard Oil Co. Kentucky ..... Jacksonville EL4-5001
Ga Standard Oil Co. Kentucky ..... Atlanta JA5-0011
Ill The Alpha-Molykote Corp. ..... 1200 Lambda Ave. Skokie HO5-7007
Ky Standard Oil Co. Kentucky ..... Louisville MU7-1401
Mich Penn Petroleum Corp. ..... 7121 Westfield Ave. Detroit 4 ..... TA4-3000
Mo Standard Oil Co. Kentucky ..... Jackson FL5-4701
Ohio Sovereign Oil & Chemical Co. ..... 30130 Lakeland Blvd. Wickliffe WO8-0201
Pa Lesco Supp. Sales Co. ..... 42nd & Arch St. Philadelphia 4 ..... EV8-0800
Tex The Alpha-Molykote Corp. ..... 5700 Richmond Ave. Houston 27 ..... MO6-0303

ALSTHOM, NUCLEAR DIV. ..... 38, Ave. Hoche, Paris 16, Fr PAS75-19
Arg Alsthom ..... Ave Roque S. Pena 970-6, Buenos Aires 34.3001
Braz Francelat ..... Ave Rio Branco 311 Rio De Janeiro 22-0500
Col Manglaya ..... Apart. Aereo 6855, Bogota 32.342
Fin Oy Sulfac A B ..... Mannerheimintie 14, Helsinki 60.096
Gr Desmar et Tsakos ..... 8 Ave Stadion, Athens 00.850
Hell Cie Generale d'Electricite ..... 64 Koningsingel, La Haye 11 00 10
Ind Sulzbel ..... Fabra St. Bombay 383.421
Iran Societe Iranienne Fapek ..... Av. Saadi, Teheran 34.975
Port Agencia Geral Do Material Electrico ..... Rua Das Industrias 4, Lisboa 60.802
Sp General Electrica Espanola ..... Apartado 441, Bilbao 90.040
Turk Turkiye (Vinnik Tirmer) ..... Kumbaz Falsa 6/14, Istanbul 244.44.70
Ven Frandec ..... Apartado Postal 1347, Caracas 41.45.52

ALUMINUM CO. OF AMERICA ..... 1501 Alcoa Bldg. Pittsburgh 19, Pa AT1-4545
Cal Aluminum Co. of America ..... 1142 Wilshire Blvd. Los Angeles 17 ..... DU8-1500
Ga Aluminum Co. of America ..... 1215 Peachtree St. NE, Atlanta 9 ..... TR3-7541
Ill Aluminum Co. of America ..... 420 N Michigan Ave. Chicago 11 ..... MO7-0241
Mass Aluminum Co. of America ..... 30 Providence St. Boston 16 ..... HU9-3000
Mich Aluminum Co. of America ..... 610 New Center Bldg. Detroit 2 ..... TR3-8100
Mo Aluminum Co. of America ..... Continental Bldg. St. Louis 8 ..... PO5-0900
NY Aluminum Co. of America ..... 600 Park Ave. New York 17 ..... MU5-0040
Ohio Aluminum Co. of America ..... 5000 Vinney Pkwy. Cincinnati 9 ..... CA1-7000
Ohio Aluminum Co. of America ..... 1400 Terminal Tower, Cleveland 13 ..... CH3-0800
Pa Aluminum Co. of America ..... 1315 Pelnley-Plaza Tower Bldg. Phila 3 ..... LO3-0240
Tex Aluminum Co. of America ..... 901 Thomas Bldg. Dallas 2 ..... RI-0201
Wash Aluminum Co. of America ..... 1411 4th Ave. Bldg. Seattle 1 ..... MA4-0400

ALUMINUM WIRE & CABLE CO. LTD. 2 St. James's Sq. London SW1, Eng. TRA6011
NY Aluminum Transcontin. Inc. ..... 50 Rockefeller Plaza, New York 20 ..... CI7-0345

AMCO ENGINEERING CO. ..... 7225 Akedie St. Chicago 31, Ill GR8-4800
Cal W. J. Pardy Co. ..... 112 7th St. San Francisco UN8-0800
Cal Pedmark Electronic Assoc. ..... 6007 W Wash Blvd. Los Angeles WE1-1042
Colo Kaufer-Cox Co. ..... 1900 S Inca St. Denver WE9-0261
DC L. G. White Co. ..... 1340 Connecticut Ave. NW, Washington DU7-0800
Fla MW Engineering Co. ..... 1897 Oak Lake Dr. Clearwater 446-0775
Mass Instrument Dynamics, Inc. ..... 11 Albion St. Wakefield CR-6100
Mo H. W. Kaufman & Co. ..... 4800 Duncan Ave. St. Louis OL3-7000
NY Tunis Assoc. ..... 114 Mills Ave. Syracuse HO9-40
NY F & F Associates ..... 107 Cherry St. East Meadow MU7-0477
Ohio M. P. Odell Co. ..... 20014 Center Ridge Rd. Westlake TE1-0900
Tex L. R. Ward Co. ..... 5000 Canton St. Dallas 26 ..... RI-0004
Wash R. G. Dealer Assoc. ..... 1917 Norman St. Seattle JA5-7000

AMERAY CORP. ..... Rt. 46, Rand, NJ PO6-0900

AMERCOAT CORP. ..... 4809 Firestone Blvd. S Gate, Cal LO4-2501
Fla Amercoat Corp. ..... 5404 Dennis St. Jacksonville
Ill Amercoat Corp. ..... 901 Pitner Ave. Evanston
NJ Amercoat Corp. ..... 500 Carnegie Ave. Kenilworth
NY Amercoat Corp. ..... 117 Colgate Ave. Buffalo
Tex Amercoat Corp. ..... 5555 Supply Row. Houston

AMERICAN AIR FILTER CO. ..... 215 Central Ave. Louisville 8, Ky HE7-5411
Cal American Air Filter Co., Inc. ..... 480 9th St. San Francisco KL3-1404
Cal American Air Filter Co., Inc. ..... 6181 York Blvd. Los Angeles CL5-2801
DC American Air Filter Co., Inc. ..... 4805 St. Elmo Ave. Washington 14 ..... OL2-1200
Fla R. J. Clark Equipment Co., Inc. ..... 7750 NW 7th Ave. Miami PL3-4544
Ga American Air Filter Co., Inc. ..... 1450 W Peachtree St. NW, Atlanta TR6-8056
Ill American Air Filter Co., Inc. ..... 6346 S Pulaski Rd. Chicago 29 ..... LU8-5007
Ill Air Filter & Equipment Co. ..... 2007 N Bebbie Ave. Chicago HU6-0810
Mass Portlandt Associates ..... 288 Concord Ave. Belmont IV4-9200
Mo C. H. Barney Co., Inc. ..... 4050 Chouteau Ave. St. Louis 10 ..... EA-7000
NY Assoc. Thermal Products, Inc. ..... 604 W Broadway, New York CH7-0800
Ohio Minor-Webber, Inc. ..... 1001 Euclid Ave. Cleveland 15 ..... TO1-0400
Tex The Ray Co. ..... 4401 Belmont Ave. Dallas TA4-0177

AMERICAN BIRCH ARMA CORP. 320 Fulton Ave. Hempstead, NY PI1-3000
Cal American Beach Arms Corp. ..... 8400 Wilshire Blvd. Beverly Hills BR2-4200
Cal American Beach Div. ..... 200 Kiss St. S San Francisco JO9-2020
DC American Beach Arms Corp. ..... 1000 Connecticut Ave. NW, Washington ST3-1000
Ill American Beach Div. ..... 57 S Wabash Ave. Chicago DE3-1001
Mich American Beach Div. ..... 17000 W McNichols Rd. Detroit 35 ..... BR3-1000
NY American Beach Div. ..... 120 Power House Rd. Roslyn Hts. MA1-9400
Ohio American Beach Arms Corp. ..... 940 W 1st St. Dayton RA3-1180
Ohio American Beach Div. ..... 13011 Enterprise Ave. Cleveland 30 ..... OR1-7000
Tex American Beach Arms Corp. ..... Meadow Bldg. Dallas EM3-5001

AMERICAN CAST IRON PIPE CO. SPEC. PROD. DIV.
Box 2002, Birmingham 2, Ala AL1-8221

AMERICAN ELECTRONIC LABS. Colmar, Pa.
Cal C. W. Fowler Co. ..... 1810 Pico Gale Ave. South Pasadena MU3-5041
DC H. W. Julian & Son ..... 8030 Cinco St. Bethesda 14, Md OL4-6400
Fla Lynch-Gentry Associates, Inc. ..... 7223 Central Ave. St. Petersburg DP5-8181
Ill R. E. Dunn, Inc. ..... 6001 W Lake St. Chicago 44 ..... EM-2700
Ind Tuco ..... 6005 E Indianapolis, Wichita MU5-9700
Mass The Adkins Corp. ..... 1000 W Centre St. W Roxbury 32 ..... FA5-7040
NY Lanthier Enterprise ..... Box 68, Hurley, NY HU9-5200
NY John S. Lightner ..... 200 Westminster Ave. Syracuse 10 ..... GR6-0000
Tex George Wainwright and Associates ..... 11884 E Northwest Hwy. Dallas 18 ..... DA1-0000
Wash J. J. Becker Co. ..... 2011 W Galer St. Seattle 99 ..... AT3-5700
Can Conway Elec. Enterprise Reg'd ..... 1514 Eglinton Ave. W, Toronto 10 Ont. HU9-3070
For International Electro-Comp. Co. ..... Box 2005, Port Reach, N. J. CA5-9400

AMERICAN ELECTRONICS INC.
1204 E Rose Ave. Fullerton, Cal HA5-7702

AMERICAN FELT CO. ..... Glenville Rd. Glenville, Conn HE1-4200
Ga American Felt Co. ..... 200 Technical Dr. NW, Atlanta
Ill American Felt Co. ..... 607 W Jackson Blvd. Chicago 7.

TERR	MANUFACTURERS SALES/OR REPRESENTATIVES OFFICES	TEL. NO.
Mass	American Pain Co. ..... 933 Congress St, Boston 10	
Mich	American Pain Co. ..... 8800 E Jefferson Ave, Detroit 7	
Mo	American Pain Co. ..... 1301 Pine St, St. Louis 3	
NY	American Pain Co. ..... 350 4th Ave, New York 1	
NY	American Pain Co. ..... 60 St. Paul St, Rochester 4	
Ohio	American Pain Co. ..... 1045 E 6th St, Cleveland 14	
Pa	American Pain Co. ..... 1011 Lafayette Bldg, Philadelphia 9	
SC	American Pain Co. ..... 405 Cedar St, Greenville	
Tex	American Pain Co. ..... 3500 McKinney, Dallas 2	

AMERICAN GAS FURNACE CO. 149 Spring St, Elizabeth, NJ ELS-3120

Ala	Consolidated Engineering Co. ..... Box 6011, Birmingham 9	TR-4005
Cal	Daniel F. McKay ..... 13045 Atlantic Ave, Lynwood	NE3-4094
Conn	Stanley P. Rockwell Co. ..... 196 Homestead Ave, Hartford 12	CH6-4883
Ga	Consolidated Engineering Co. ..... 2970 Peachtree Rd, NE, Atlanta 5	CY7-1206
Ill	E. L. Mifflin ..... Box 345, Prospect Heights	CL8-3087
Ind	Howard W. Mooney Co. ..... 110 S Central Ave, Clayton 5	
NJ	Hardwick Associates ..... 50 E Dover, Westfield	FL5-0894
NJ	V. C. Bailey ..... 1907 S 10th St, Camden 4	WO4-0805
NJ	Walter E. Seaman ..... 141 Essex St, Westfield	AD8-0127
NY	Ralph C. Schwarz & Assc ..... 70 College Ave, Rochester 7	HA-6000
Ohio	A. R. Grimbach Co. ..... 14807 Detroit Ave, Cleveland 7	AC1-1042
Ohio	J. C. van Meer Co. ..... 1021 Tremont St, Columbus 10	HU8-1648

AMERICAN INSTRUMENT CO INC 8030 Georgia Ave, Silver Spring, Md JU9-1717

Cal	American Instrument Co, Inc. ..... 1400 Bay Shore Blvd, San Francisco	JU7-1000
Cal	American Instrument Co, Inc. ..... 14622 Lorna Mercia Blvd, Los Angeles	GR4-4811
Ga	The Ellison Co. ..... 890 Wesley Bldg, Atlanta	JA4-5209
Mass	American Instrument Co, Inc. ..... Box 644, Bedford	CR6-0014
Mo	American Instrument Co, Inc. ..... 8440 S Grand Blvd, St. Louis 18	PE2-0800
NJ	American Instrument Co, Inc. ..... 15 N 8th St, Camden 3	WO3-0344
NY	American Instrument Co, Inc. ..... 60 Church St, New York	COT-8974
NY	American Instrument Co, Inc. ..... 1240 Dewey Ave, Rochester	CL4-6070
Ohio	American Instrument Co, Inc. ..... Box 7004, Cleveland 31	LA4-0840
Pa	American Instrument Co, Inc. ..... Box 207, Allison Park	ST1-1494
Tex	Southwestern Eng. & Equip. Co. ..... 4845 Lovesom Ave, Dallas	LA5-7400
Wisc	American Instrument Co, Inc. ..... 840 W Washington St, Chicago 6, Ill.	HA-5400

AMERICAN LAUNDRY MACHINERY INDUSTRIES
Rose & Irvine Aves, Cin 12, Ohio RE1-5300

Cal	American Laundry Machinery ..... 1000 Bryant St, San Francisco 3	UN5-7021
Cal	American Laundry Machinery ..... 1440 E 4th St, Los Angeles 33	AN8-0181
DC	American Laundry Machinery ..... 1006 Conn. Ave, NW, Washington 6	HU5-8105
Ga	American Laundry Machinery ..... 2301 Spring St, NW, Atlanta 9	TR5-4206
Ill	American Laundry Machinery ..... 56 E Walker St, Chicago	FR6-4400
Mass	American Laundry Machinery ..... 1050 Hancock St, Quincy 69	GR6-7000
Mich	American Laundry Machinery ..... 660 Griswold St, Detroit 26	WO3-3040
NY	American Laundry Machinery ..... 40 E 34th St, New York 16	LE8-6000
Pa	American Laundry Machinery ..... Center & Highland, Pittsburgh 6	EM2-5021
Pa	American Laundry Machinery ..... 22 Bennett Grove Ave, Philadelphia	LA5-8215
Tex	American Laundry Machinery ..... 408 S, Oakland St, Dallas 20	RY1-5001
Wash	American Laundry Machinery ..... 305 Elliott Ave, W, Seattle 99	AT4-3940

AMERICAN LAVA CORP. ..... Headquarters Rd, Chattanooga 5, Tenn AM5-3411

AMERICAN METAL PROBE, CO. 5900 Lincoln Ave, Detroit 4, Mich TY7-6000

DC	Aircraft Supply Co. ..... 1040 Connecticut Ave, Washington 6	AD5-5700
Mich	Engineering Science Div. ..... Box 485, Ann Arbor	HO5-5841

AMERICAN NUCLEAR CORP. Box 436, Oak Ridge, Tenn CL3984

AMERICAN OPTICAL CO., INSTRUMENT DIV.
Eggert & Sager Ave, Buffalo 15, NY TS5-4000

Cal	American Optical Co. ..... San Francisco 3	VA8-8300
DC	American Optical Co. ..... Washington	EX6-6001
Ill	American Optical Co. ..... Chicago 90	CE5-1202
Mass	American Optical Co. ..... Waltham 54	TW2-5425
Mich	American Optical Co. ..... Detroit 35	WO6-4010
Mo	American Optical Co. ..... St. Louis 3	CE1-5000
NY	American Optical Co. ..... New York 17	MU2-7245
Pa	American Optical Co. ..... Hatboro	HE6-7000
Pa	American Optical Co. ..... Bentleyville	AT1-6615
Tex	American Optical Co. ..... Dallas 31	RY-6881
Can	American Optical Co. ..... Toronto, Ontario	EM6-4841

AMERICAN OPTICAL CO.,
SAFETY FRAME, DIV. ..... 28 Mechanic St, Southbridge, Mass FO4-3311

Cal	American Optical Co. ..... 1400 Cole Pl, Hollywood 28	HE5-4181
Cal	American Optical Co. ..... 55 Kearny St, San Francisco 8	SU1-4800
Colo	American Optical Co. ..... 846 Delaware St, Denver	AL6-4867
Ill	American Optical Co. ..... 10200 Pacific Ave, Franklin Park	GL3-6860
Ga	American Optical Co. ..... 884 Piedmt Ave, NE, Atlanta 9	TR9-3974
Mo	American Optical Co. ..... 7700 Washington Blvd, St. Louis 5	CE3-1800
Mich	American Optical Co. ..... 8800 Schaefer St, Detroit 28	WE3-8722
Ohio	American Optical Co. ..... 1335 Bedford Ave, Cleveland 14	CH3-5900
Pa	American Optical Co. ..... 60 N Juniper St, Philadelphia 7	LO6-8719
Tex	American Optical Co. ..... 2001 W Clay St, Houston 19	JA6-1941
Wash	American Optical Co. ..... 802 Denny Ave, N, Seattle 9	MA4-9770

AMERICAN PORCAIN & CHINA CORP.
3000 W 6th St, Los Angeles 54, Cal.

Cal	Amer. Porcln & Chem. Corp. ..... 3000 W 6th St, Los Angeles 54	DU3-0221
Cal	Amer. Porcln & Chem. Corp. ..... 555 Montgomery St, San Francisco 4	DO3-1200
DC	American Porcln & Chem. Corp. ..... 1011 K St, NW, Washington 5	ST7-7207
Ga	American Porcln & Chem. Corp. ..... 2301 Peachtree Rd, NE, Atlanta 5	NO-5900
Ill	American Porcln & Chem. Corp. ..... 520 Ave St, W Chicago	CO7-0017
Ill	Amer. Porcln & Chem. Corp. ..... 5007 W Potomac Ave, Chicago 44	CO7-0017
La	Amer. Porcln & Chem. Corp. ..... 1000 Pontiffall Ave, Shreveport	42 2-4400
Ohio	Amer. Porcln & Chem. Corp. ..... 2900 Riverside Dr, Columbus 22	HU5-0400
Ore	Amer. Porcln & Chem. Corp. ..... 1000 SW Broadway, Portland 1	CA6-5400

AMERICAN PRODUCTS MFG. CO.
8127-29 Glendale St, New Orleans 19, La UN6-4282

TERR	MANUFACTURERS SALES/OR REPRESENTATIVES OFFICES	TEL. NO.

AMERICAN RADIO CO. INC. ..... 445 Park Ave, New York 22, NY PL3-0940

AMERICAN SHELTUS & REPORS CO. ..... 120 Broadway, New York 5, NY BO3-5900

Ala	Amer. Stmpl. & Rdng. Co. ..... 405 Dalton St, Birmingham	FA5-1505
Cal	Amer. Stmpl. & Rdng. Co. ..... 4800 S 50 St, Los Angeles 22	
Md	Amer. Stmpl. & Rdng. Co. ..... Highland & Eastbourne Aves, Baltimore 28	OR-0400
Mass	Amer. Stmpl. & Rdng. Co. ..... 39 Providence St, Boston 16	LB-0797
Mich	Amer. Stmpl. & Rdng. Co. ..... 7400 Bel Blvd, Detroit 2	TU2-0040
Mo	Amer. Stmpl. & Rdng. Co. ..... St. Louis	JA4-0040
Ill	Amer. Stmpl. & Rdng. Co. ..... 109 St. Charles St, Hanover 1	MD-0040
NY	Amer. Stmpl. & Rdng. Co. ..... 205 E Main St, Rochester 4	LO8000
Ohio	Amer. Stmpl. & Rdng. Co. ..... 1000 Carew Tower, Cincinnati	CE1-1070
Ohio	Amer. Stmpl. & Rdng. Co. ..... 1400 Euclid Ave, Cleveland	PO1-0175
Pa	Amer. Stmpl. & Rdng. Co. ..... 1107 Schubert Sta. Bldg, Philadelphia 3	LO7-0130
Wis	Amer. Stmpl. & Rdng. Co. ..... 4000 W Burleigh St, Milwaukee	HU5-7400

AMERICAN STANDARD CONTROLS DIV. 3900 Trenkell, Detroit 8, Mich TR3-8000

AMERICAN-STANDARD, INDUSTRIAL DIV. Detroit 32, Mich WE3-8400

Cal	American-Standard Ind. Div. ..... 5411 W 6th St, Los Angeles	DU7-1003
DC	American-Standard Ind. Div. ..... 1750 Wisconsin Ave, Washington 16	OL6-8220
Ga	American-Standard Ind. Div. ..... 3119 Maple Dr, NE, Atlanta 5	HU-3300
Ill	American-Standard Ind. Div. ..... 1200 N Lorbolle St, Chicago 7	PO-5201-7
Mass	American-Standard Ind. Div. ..... 22 Winchester St, Newton Highlands 61	WO9-8100
Mich	American-Standard Ind. Div. ..... 600 Fisher Bldg, Detroit 2	TR8-4000
Minn	American-Standard Ind. Div. ..... 415 Lumber Exch, Minneapolis 2	FE6-8242
NY	American-Standard Ind. Div. ..... 40 W 40th St, New York 18	PE6-8170
Ohio	American-Standard Ind. Div. ..... 1010 Euclid Ave, Cleveland 15	CE1-8118
Pa	American-Standard Ind. Div. ..... 1027 Pennsylvania Blvd, Philadelphia 3	LO5-8970
Tex	American-Standard Ind. Div. ..... 2333 Texas Bank Bldg, Dallas 2	RY-1070
Wis	American-Standard Ind. Div. ..... 8801 W Capitol Dr, Milwaukee 22	HO4-0500

AMERICAN-STANDARD PROD. (CAN) LTD. 1201 Dupont St, Toronto 4, Ont, Can LE4-3321

BC	American-Standard ..... 305 Drake St, Vancouver	MU8-7202
Can	American-Standard ..... 8005 Jeanne Mance St, Montreal	DU1-4041
Can	American-Standard ..... 89 Pioneer Ave, Winnipeg, Man.	WH2-0027
Can	American-Standard ..... 350 Ellis St, E, Windsor, Ont.	CL6-6005
Can	American-Standard ..... 77 Montcalfe St, Ottawa, Ont.	CH8-7000
Can	American-Standard ..... 45 James St, N, Hamilton, Ont.	LY7-0002
Can	American-Standard ..... 105-11th Ave, SE, Calgary, Alb.	AM3-4000
Can	American-Standard ..... 13010-111th Ave, Edmonton, Alb.	HU5-7007
NS	American-Standard ..... Halifax & Granville	3-0400

AMERICAN STERILIZER CO. .. Box 420, Erie, Pa GL6-2021

Cal	American Sterilizer Co. ..... 4300 Lankershim Blvd, N Hollywood	
Cal	American Sterilizer Co. ..... 17 Vista Ave, San Mateo	
Colo	American Sterilizer Co. ..... 4800 W Alameda St, Denver	
Fla	American Sterilizer Co. ..... 4404 N Dale Mabry, Tampa	
Ill	American Sterilizer Co. ..... 6071 S Western Ave, Chicago 43	
La	American Sterilizer Co. ..... 611 Gravier St, New Orleans 12	
Md	American Sterilizer Co. ..... 10 Wisconsin Circle, Chevy Chase 15	
Mass	American Sterilizer Co. ..... 1200 Beacon St, Brookline 46	
Mo	American Sterilizer Co. ..... 6700 Chippewa St, St. Louis 9	
NY	American Sterilizer Co. ..... 5477-10 Jamaica Ave, Bellerose 26	
Pa	American Sterilizer Co. ..... 100 Greenwood Ave, Wyncote	
Tex	American Sterilizer Co. ..... 4800 Gaston St, Dallas 5	

AMERICAN TRUSAD ELECTRIC CO. 1600 N Fuller Ave, Los Angeles 46, Cal HO4-3422

AMERICAN TIME PRODUCTS, DIV. BULOVA WATCH CO. INC.
41-20 Woodside Ave, Woodside 77, NY OL1-7000

Cal	Amer. Time Prods. Div. ..... 324 N Lake Ave, Pasadena	MU1-0116
NJ	J. L. Drumm Associates ..... Box 7116, Roselle Sta, Newark 7	HU8-3366
NY	Conn Technical Sales Inc. ..... 19 Andrew Ln, New Rochelle	MD-7045
Pa	W. S. Kirkpatrick & Co. Inc. ..... 88 Upper Montclair Plaza, Upper Montclair, NJ	

AMERICAN TRANSIS CORP. SUB OF ESCO ELECTRONICS, LTD.
54-01 20th St, LIC 6, NY EM6-1414

Cal	C. W. Hood Co., Inc. ..... 6600 S Hoover St, Los Angeles	
La	Gamma Industries, Inc. ..... 3355 Ted Dunham, Baton Rouge	
Mich	B. Z. Robin Co. ..... 20000 Pinehill Ave, Detroit 27	
Mo	Accessories-Sunshine Corp. ..... 111 W Jewel Ave, St. Louis	
NJ	G. Leadbeater Enterprises ..... 106 Franklin Ave, Nutley	

AMERICAN WELDING & MFG. CO. 505 Harn Rd, Warren, Ohio EX3-2201

Cal	R. W. Dreyer ..... 7131 Placentia Ave, Costa Mesa	LO-7169
Cal	L & L Associates ..... 4444 Piedmont Ave, Oakland 11	OL3-9505
Colo	Jones & Myers Co. ..... 2801 Bannock St, Denver 4	YE6-0511
Fo	C.R. Tiber Co. ..... 10 Bala Ave, Bala Cynwyd	MO4-9400
Utah	Jones & Myers Co. ..... 465 S 3rd S, Salt Lake City	EL5-5401
Wash	Associated Industries ..... 1700 Minnesota Ave, Seattle 98	EA5-4400

AMP INCORPORATED ..... Eisenhower Blvd, Harrisburg, Pa JO4-8701

Cal	AMP, Inc. ..... 2120 W El Segundo Blvd, Hawthorne	OS5-1100
Cal	AMP, Inc. ..... 1056 Rollins Rd, Burlingame	OX7-0047
Ill	AMP, Inc. ..... 8566 Northwest Hwy, Chicago 30	EN-1880

AMPEREX ELECTRONIC CORP. 230 Duffy Ave, Hicksville, NY WE1-4800

Cal	W. J. Purdy Co. ..... 215 7th St, San Francisco 3	UN5-2000
Cal	Shepherd-Winnes Co. ..... 2120 Colorado Blvd, W Hollywood 38	HO6-2171
Colo	Mel Pearson & Co. ..... 1600 S Acoma St, Denver 23	SP7-7000
Ga	J. Miller Assoc. ..... 1400 Peachtree St, NW, Atlanta 9	EL8019
Ill	Amperex ..... 9440 W North Ave, Elmwood Park	GL3-2484
Mass	Gerber Sales Co. Inc. ..... 40 Pearl St, Brookline	BE5-0400
NY	Kalupa Sales Corp. ..... 1501 Broadway, New York 1	MU4-7772
NY	E. A. Ostrom & Assoc. ..... 101 Packard Dr, Syracuse	GL4-2462
Ohio	C. L. Pugh Co. ..... 2540 Riverside Dr, Columbus 22	HU8-4000
Ore	Richard Lagg Co. ..... 1000 SW 21st Ave, Portland 5	CA5-0720
Pa	Pangaro Sales Co. ..... 121 S 52nd St, Philadelphia 3	LO8-7060
Tex	Leed & Co. ..... 5215 N Ollive St, Dallas 1	HA-8000

TERR	MANUFACTURERS SALES/OR REPRESENTATIVES OFFICES	TEL. NO.

AMPERITE CO. INC. ..... 561 Broadway, New York 12, NY CA6-4446

Cal	Wallace & Wallace ..... 1200 Maple Ave, Los Angeles 15	RY-0401

AMPLIFIER CORP. OF AMERICA 398 Broadway, New York 13, NY WA6-2020

ANACONDA WIRE & CABLE CO. 25 Broadway, New York 4, NY BO3-4000

Cal	W. Gryland ..... 1200 Pine St, San Francisco 9	PO2-0111
Cal	A. Tracy ..... 818 W 6th St, Los Angeles 17	MA8-5971
Colo	E. Dawn ..... 700 Railway Exchange Bldg, Denver 2	AC3-0010
Ga	M. Black ..... 1015 Hardee-Hewatt Bldg, Atlanta 3	JA5-0400
Ill	E. Miller ..... 50 N Wacker Dr, Chicago 6	FR8-0200
La	H. Pollard ..... 940 Carlile Bldg, New Orleans 12	JA5-0721
Mass	D. O'Leary ..... 834 Boylston St, Boston 07	LO8-4040
Mich	W. Olson ..... 621 New Center Bldg, Detroit 2	TR8-3000
Mo	W. Carter ..... 108 W 14th St, Kansas City 5	JA6-0033
Pa	T. Durlin ..... 1216 Walnut St, Bldg, Philadelphia 5	PE6-0110
Tex	J. Sandiff, Jr. ..... 600 Texas Nat'l Bank Bldg, Houston 2	CA6-5375

ANALYTICAL MEASUREMENTS, INC.
105 Main St, Chatham, NJ MU5-3434

ANDERSEN LABS. INC. ..... 301 New Park Ave, West Hartford 36, Conn AM6-7351

Mich	Electro-Rep ..... 20819 Telegraph Rd, Detroit 41	TU1-1800
NY	J. S. Gamble ..... 51 Edgewater Ln, Rochester	PO-1433
Tex	V. J. Sykes ..... Box 50025, Dallas 50	FL3-0940
Per	Dage Corp. ..... 319 E 44th St, New York City	MU9-0700

ANGELICA UNIFORM CO. ..... 1020 Olive St, St. Louis 3, Mo CE1-0334

Cal	Angelica Uniform Company ..... 1000 W Pico Blvd, Los Angeles 6	DU5-1301
Ga	Angelica Uniform Co. ..... 817 Hayden St, NW, Atlanta 18	GR5-7201
Ill	Angelica Uniform Co. ..... 177 N Michigan, Chicago 1	RA3-7464
NY	Angelica Uniform Co. ..... 101 W 40th St, New York 18	CE5-0101

ANHEM CO. ..... 9640 S Vail Ave, Montebello, Cal RA3-9501

Ala	F. A. Thomas Co. ..... 1005 Liberty St, Mobile	GE2-6702
Cal	Trident Engineering Co. ..... 16 Ducie St, San Francisco 6	YU8-0540
Colo	Denver Engrg. Sales Co. ..... 2700 E 3rd Ave, Denver 6	DE3-0500
Ga	W. K. Sullivan ..... 3150 Maple Dr, NE, Atlanta 5	CE7-0300
Ill	P.B. Hansen Co. ..... 10000 S Western Ave, Chicago 43	BR8-0202
La	Mosby-Price, Inc. ..... 2040 Lapine St, Baton Rouge 6	EM4-0511
NY	Mason-Sutton, Div. Washington Corp. 970 Park Ave, New York	
Ohio	H. S. Brown Co. ..... 1205 W 117th St, Cleveland 7	AC3-0440
Pa	W. J. Gallagher Co. ..... 2001 W Bond St, Philadelphia 45	RA8-0940
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Cal G. B. Lyman Co. ..... 68 New Montgomery St, San Francisco ..... [illegible]
Cal Sandquist Corp. ..... 555 W 53rd St, Los Angeles ..... [illegible]
DC Atwood & Morrill Co. ..... 1000 E St. NW, Washington ..... [illegible]
Fla T. C. Hayward & Co. ..... 806 W Adams St, Jacksonville ..... [illegible]
Ill Hamlin & Stevens ..... 140 S Dearborn St, Chicago ..... [illegible]
Mo Midwestern Power Eqpt. Co. ..... 1234 W 47th St, Kansas City 12 ..... VA1-[illegible]
NY Ward & Schade, Inc. ..... 150 Broadway, New York ..... CO7-[illegible]
NC T. C. Hayward & Co. ..... 420 E Morehead St, Charlotte ..... [illegible]
Pa C. R. Rapser Co. ..... 1721 Clover Bldg, Pittsburgh ..... AT1-[illegible]
Pa Ward & Schade, Inc. ..... 730 Bethlehem Pike, Philadelphia ..... [illegible]
Tex Hayden O'Neill & Co. ..... 6510 Travis St, Houston ..... [illegible]
Wash Barnhard-Woodford Co. ..... 1421 4th Ave, Seattle ..... [illegible]

ABC. ETS. AUBERT & DUVAL ..... 41 rue de Villiers, Neuilly-sur-Seine, Fr
Arg Representaciones de Aparatos S.A. ..... Bolivar 275, Buenos Aires
Belg Mr. Mandard ..... 108, Ave. Volmain, Brussels
Den Mr. Hindhagang ..... Indkaerst de 15, Copenhagen
Fin Aktiebolaget Elemaus Mekanaller ..... Alexanderagatan 1, Helsingfors
Ger Paul-Heinrich Dahn ..... Langer Heck Str 22, Offenbach
Spa Olabarra S.A. ..... Conses 25, Barcelona
Swit Compagnie Mondialgraphe S.A. ..... 1, rue de Rive, Geneva

AUDION MFG. CO. ..... 350 Bank St. Middletown, Conn ..... DE-[illegible]
Conn D. Atwell ..... Maple Ave, Durham ..... [illegible]
Conn G. Shelley ..... R. F. D. 2 Gateway ..... [illegible]
Mich A. R. Dixon ..... 4040 Woodward Ave, Royal Oak ..... JO6-[illegible]
NY J. C. Newman, Jr. ..... P.O. Box 2076, Rochester 10 ..... BU1-[illegible]
NY J. J. Gabowski ..... 300 8th St, Brooklyn 15 ..... [illegible]

AUTOCALL CO. ..... Shelby, Ohio ..... 3-[illegible]
Cal A. H. Hansen ..... 500 6th St, San Francisco 3 ..... [illegible]
Cal C. Glass ..... 1400 W 8th St, Los Angeles 15 ..... [illegible]
Conn J. E. O'Connor ..... 555 Hopmeadow St, Hartford ..... [illegible]
Ga A. R. Kibler ..... 500 Cypress Bldg, Atlanta 3 ..... [illegible]
Ill T. F. Hennessy, Jr. ..... 1700 E 79th St, Chicago 49 ..... [illegible]
Mich H. C. Manchester ..... 550 Cross Bldg, Detroit 2 ..... [illegible]
NY J. H. Manchester ..... 551 Fifth Ave, New York 17 ..... [illegible]
NY C. W. Abramo ..... 2452 Walbridge Dr, Buffalo 21 ..... [illegible]
Ohio R. M. Austin ..... 18002 Hilliard Rd, Cleveland 7 ..... [illegible]
Ohio M. J. Dorth ..... 5807 Iris Ave, Cincinnati 8 ..... [illegible]
Pa W. H. Menger ..... 1700 Sansom St, Philadelphia 3 ..... [illegible]
Wis L. B. Schlosser ..... 3460 W Wells St, Milwaukee 3 ..... [illegible]

AUTOCLAVE ENGINEERS INC. ..... 2925 W 22nd St, Erie, Pa ..... [illegible]
Ill Autoclave Engineers Sales Corp. ..... 1160 Westgate Ave, Oak Park ..... [illegible]
Ind Autoclave Engineers Sales Corp. ..... 1160 Westgate Ave, Oak Park, Ill ..... [illegible]
Iowa Autoclave Engineers Sales Corp. ..... 1160 Westgate Ave, Oak Park, Ill ..... [illegible]
Ill Autoclave Engineers Sales Corp. ..... Bldg. 1-Newark Airport, Newark 5 ..... [illegible]
NY Autoclave Engineers Sales Corp. ..... Bldg. 1-Newark Airport, Newark 5, NJ ..... [illegible]
Pa Autoclave Engineers Sales Corp. ..... Bldg. 1-Newark Airport, Newark 5, NJ ..... [illegible]
Can Autoclave of Canada, Ltd. ..... 550 Spring Ave, Toronto 10, Ont ..... [illegible]

AUTOMATIC CONTROL ENGRG. LTD. ..... Bushy Pk, Hampton Rd, London SW6, Eng ..... FUL[illegible]
Aust c/o Continental John Servo Ltd. ..... Box 5170, 5 Melbourne, Victoria
Ban Continental John Servo Ltd. ..... Av. Pentland, Talisman
NZ Automatic Control Eqp. Ltd. ..... 15 Bloom St, Manchester 1

AUTOMATIC ELECTRIC SALES CORP. ..... Northlake, Ill ..... FU5-[illegible]
Cal Automatic Electric Sales Corp. ..... 4465 W Pico Blvd, Los Angeles ..... WE3-[illegible]
DC Automatic Electric Sales Corp. ..... 1130 Connecticut Ave, NW, Washington ..... FE7-[illegible]
Fla Automatic Electric Sales Corp. ..... 1480 Edgewater Dr, Orlando ..... GA5-[illegible]
Mass Automatic Electric Sales Corp. ..... 701 Main St, Waltham ..... TW9-[illegible]
Mich Automatic Electric Sales Corp. ..... 14801 Middlebelt Rd, Livonia ..... [illegible]
Minn Automatic Electric Sales Corp. ..... 7400 Hwy. 69, Minneapolis ..... WE5-[illegible]
Mo Automatic Electric Sales Corp. ..... 1021 Main St, Kansas City ..... HA1-[illegible]
NY Automatic Electric Sales Corp. ..... 730 3rd Ave, New York ..... MU7-[illegible]
Ohio Automatic Electric Sales Corp. ..... 6005 Lake Ave, Cleveland ..... PU1-[illegible]
Pa Automatic Electric Sales Corp. ..... 6216 Market St, Upper Darby ..... FL2-[illegible]
Tex Automatic Electric Sales Corp. ..... 318 N Pearl St, Dallas ..... [illegible]

AUTOMATIC SWITCH CO. ..... 586 Hanover Rd, Florham Park, NJ ..... FR7-[illegible]
Cal Automatic Switch Co. ..... 6345 E Washington Blvd, Los Angeles ..... [illegible]
DC J. I. Hartley ..... National Press Club Bldg, Washington 4 ..... [illegible]
Ga Kimbrough & Co. Inc. ..... 159 Hunter St, NW, Atlanta 3 ..... [illegible]
Ill Automatic Switch Co. ..... 2321 W Howard St, Chicago 45 ..... [illegible]
Mass Automatic Switch Co. ..... 1447 Washington St, W Newton 65 ..... [illegible]
Mich C. Adams, Inc. ..... 17300 W 8 Mile Rd, Southfield ..... [illegible]
Minn Plane Lemmark Co. ..... 6104 Walker St, Minneapolis 26 ..... [illegible]
NJ Automatic Switch Co. ..... 1500 Kings Hwy, E, Haddonfield ..... [illegible]
Ohio Andrews-Gobb, Inc. ..... 1013 W 25 St, Cleveland 13 ..... [illegible]
Tex Glidden Engrg. & Eqp. Co. ..... 2002 Winchester St, Houston 3 ..... [illegible]
Wash Standard Electric Sales ..... 101 W Lucile St, Seattle 4 ..... [illegible]
Wis G. E. Beverly Co. Inc. ..... 3050 N Port Washington Rd, Milwaukee 27 ..... [illegible]

AUTOMATION PRODUCTS, INC. ..... 3800 Gen Bay St, Houston 26, Tex ..... [illegible]

AUTOMOTIVE & AIRCRAFT DIV. AMER. CHAIN & CABLE CO., INC. ..... 401 Stephenson Bldg, Detroit, Mich ..... TE5-[illegible]

AUTOMETICS DIV. NORTH AMER. AVIATION ..... 9150 E Imperial, Downey, Cal ..... [illegible]
Ala Automation Ind. Prods. c/o H.A.A. ..... 2002 S Memorial Pkwy, Huntsville ..... [illegible]
Cal Automation Ind. Products ..... 1800 El Camino Real, Burlingame ..... [illegible]
Cal Automation Ind. Products ..... 3600 E 70th St, Long Beach 5
Ill Automation Ind. Products ..... Prudential Plaza, Chicago 1 ..... [illegible]
Mass Automation Ind. Products ..... 1396 Beacon St, Brookline 46 ..... [illegible]
NY Automation Ind. Products ..... 717 5th Ave, New York 22 ..... [illegible]
Ohio Automation Ind. Products ..... 901 Tennessee Ave, Cincinnati ..... [illegible]
Ohio Automation Ind. Products ..... Box 6021, Cleveland 20 ..... [illegible]
Tex Automation Ind. Products ..... 4810 Pennsylvania, Dallas 11 ..... [illegible]

AUTO-ATOMIC ..... 11 rue de la Papinière, Paris 5e, Fr ..... [illegible]

AVELEY ELECTRIC, LTD. ..... 5 Gubandon, Essex, Eng ..... [illegible]

AVERY & SAUL CO. ..... 195 Bridge Ave, Cambridge, Mass

AVICA CORP. ..... Box 180, Newport, Ill ..... [illegible]

AVIEN, INC. ..... 58-15 Northern Blvd, Woodside 77, NY ..... [illegible]
Cal Avien Service Corp. ..... 1260 S Boyle Ave, Los Angeles 23 ..... [illegible]
Colo Peterson Co. ..... 4040 Colorado Blvd, Denver ..... [illegible]
Ohio Avien, Inc. ..... 56 Linden Ave, Dayton 5 ..... [illegible]
Tex Avien, Inc. ..... 6004 Grapevine Hwy, Fort Worth ..... [illegible]
Wash W. J. McHale Co. ..... Box 486, Bellevue ..... [illegible]

AVO LTD. ..... 92-96 Vauxhall Bridge Rd, London SW1, Eng

AXEL ELECTRONICS, INC. ..... 156-20 Jamaica Ave, Jamaica 12, NY ..... [illegible]
Cal McKnight Co. ..... 1405 El Camino Real, Menlo Park
Cal Clement Co. ..... 7430 W 85th St, Los Angeles 45
Cal D. Dallas Co. ..... 3051 Garfield St, San Diego 6
Ga F. Farmer Co. ..... 777 Piedmont Terrace, NW, Atlanta 10
Ill R. E. Sumner Co. ..... 5501 W Lake St, Chicago
Mass Hathaway Electronics ..... 238 Main St, Cambridge
NY Hoole Electronics, Inc. ..... 31 Sandpiper Ln, Smithtown
NY M. J. Del Grosso ..... 2350 Seymour Ave, Bronx 60
Ohio L. D. Brown ..... Fox Hills Dr, Box 61, Dayton
Pa L. E. Stehle Co. ..... 2001 Fairmount Ave, Philadelphia
Tex Air Equipment Sales Co. ..... 3000 Inwood Rd, Dallas 35
Wash R. Johnson Co. ..... 1011 E 60th St, Seattle 15

B-I-F INDUSTRIES DIV. A.V. AIR BRAKE CO. ..... 336-D Harris Ave, Providence 1, RI ..... [illegible]
Cal B-I-F Industries, Inc. ..... 5420 Hilton St, Los Angeles 22 ..... [illegible]
DC B-I-F Industries, Inc. ..... 6230 3rd St, NW, Washington 11 ..... [illegible]
Ill B-I-F Industries, Inc. ..... 6306 N Milwaukee Ave, Chicago 46 ..... [illegible]
Kan B-I-F Industries Inc. ..... 5100 W 75th St, Prairie Village ..... [illegible]
La B-I-F Industries, Inc. ..... Box 4705, Baton Rouge 6 ..... [illegible]
Mass B-I-F Industries, Inc. ..... 9 School St, Arlington ..... [illegible]
Mich W. A. Dalzo, Inc. ..... 5100 Joseph Ave, Detroit 4 ..... [illegible]
NY B-I-F Industries, Inc. ..... 50 Vesey St, New York 7 ..... [illegible]
Ore The Instrument Laboratory, Inc. ..... 1215 SE 7th Ave, Portland 14 ..... [illegible]
Pa B-I-F Industries, Inc. ..... 610 W Hunting Pk, Philadelphia 44 ..... [illegible]
Tex B-I-F Industries, Inc. ..... 4510 N Central Expwy, Dallas ..... [illegible]
Wash The Instrument Laboratory, Inc. ..... 924 Elliott Ave, Seattle 99 ..... [illegible]

B & E LABS LTD. ..... 4 Tilney St, Park Ln, London W1, Eng

B&N CORP. ELECTRONICS & MFTR. DIV. ..... 42 Fourth Ave, Waltham 54, Mass ..... [illegible]

BTR INDUSTRIES LTD. ..... Vincent Sq, London SW1, Eng

B/W CONTROLLER CORP. ..... 2800 E Maple Rd, Birmingham, Mich ..... [illegible]
Conn Marco-Wright Corp. ..... Box 1206, New Haven ..... [illegible]
NY Nickles Engineering Co. ..... 800 Linden Ave, Rochester 25 ..... [illegible]
NY E. W. Bernhard Associates ..... 97 West St, New York 6 ..... [illegible]
Ohio G. J. Vosch ..... 4610 E 82nd St, Garfield Heights 25 ..... [illegible]
Ohio R. C. Bode ..... 1407 Reservoir, Cincinnati 37 ..... [illegible]
Okla P. King Co. ..... Box 15077, Tulsa 15 ..... [illegible]
Pa D. S. Stanley ..... 1 Belmont Ave, Bala-Cynwyd ..... [illegible]
Wis J. I. Aaron & Associates ..... 819 N Marshall St, Milwaukee 2 ..... [illegible]

BABB & CO. ..... 3 Gateway Center, Pittsburgh 22, Pa ..... [illegible]

BABCOCK & WILCOX CO. ..... 161 E 42 St, New York 17, NY ..... [illegible]
Va Atomic Energy Div. ..... 1301 Kemper St, Lynchburg

BABCOCK & WILCOX CO. TUBULAR PRODUCTS DIV. Beaver Falls, Pa ..... [illegible]
Cal B & W Tubular Prods. Div. ..... 96 S Los Robles Bldg, Pasadena ..... [illegible]
Ill B & W Tubular Prods. Div. ..... 105 S LaSalle St, Chicago 3 ..... [illegible]
Mass B & W Tubular Prods. Div. ..... 69 Central St, Wellesley 81 ..... [illegible]
Mich B & W Tubular Prods. Div. ..... 1717 Ford Bldg, Detroit 26 ..... [illegible]
Mo B & W Tubular Prods. Div. ..... 5010 Olive St, St. Louis 8 ..... [illegible]
NY B & W Tubular Prods. Div. ..... 731 James St, Syracuse 3 ..... [illegible]
NY B & W Tubular Prods. Div. ..... 655 3rd Ave, New York 16 ..... [illegible]
Ohio B & W Tubular Prods. Div. ..... 2020 Victory Pkwy, Cincinnati 6 ..... [illegible]
Pa B & W Tubular Prods. Div. ..... 1919 Packard Bldg, Philadelphia 3 ..... [illegible]
Tex B & W Tubular Prods. Div. ..... 2104 Welch St, Houston 19 ..... [illegible]

BABCOCK & WILCOX LTD. ..... 209 Euston Rd, London, NW1, Eng ..... [illegible]
NY Babcock & Wilcox, Ltd. ..... 161 E 42nd St, New York ..... [illegible]

BACON INDUSTRIES, INC. ..... 192 Pleasant St, Watertown, Mass ..... [illegible]
Cal Jack W. McDonald ..... Box 1918, Torrance ..... [illegible]

BADGER MFG. CO. ..... 230 East St, Cambridge, Mass ..... [illegible]
Cal Southport Engineering Co. ..... 235 W 52nd St, Los Angeles 7
Cal S. C. Parker ..... 870 Monadnock Bldg, San Francisco
Colo Ambler Co. ..... Box 891, Denver 1
Fla E. W. Fowler & Assoc. ..... Box 1587, Atlantic Beach
Ill Eagle Industrial Co. ..... 1022 W 18th St, E St. Louis
Ill Hayden & Co. ..... 53 W Jackson Blvd, Chicago 4
NY Piping Specialties, Inc. ..... 114 Liberty St, New York 6
NC T. C. Heyward Co. ..... Box 2006, Charlotte 3
Ohio Rupert-Ryan Co. ..... 5420 Mayfield Ave, Cleveland 27
Pa Tunnis Equipment Co. ..... 11-13 W Prospect Ave, Pittsburgh
Pa C. Kammen Co. ..... 49 S 52nd St, Philadelphia
Utah Rice Engineering Co. ..... Box 2127, Salt Lake City

BAILEY METER CO. ..... 29801 Euclid Ave, Wickliffe, Ohio ..... [illegible]
Cal Bailey Meter Co. ..... 616 S Atlantic Blvd, Monterey Park ..... [illegible]
Cal Bailey Meter Co. ..... 457 Market St, San Francisco ..... [illegible]
Ga Bailey Meter Co. ..... 1345 Peachtree St, Atlanta ..... [illegible]

Ill Bailey Meter Co. ..... 66 W Jackson Blvd, Chicago ..... [illegible]
Mass Bailey Meter Co. ..... 386 Concord Ave, Belmont ..... [illegible]
Mich Bailey Meter Co. ..... 18000 W McNichols Rd, Detroit ..... [illegible]
Mo Bailey Meter Co. ..... 7305 Broadway, Kansas City ..... [illegible]
NJ Bailey Meter Co. ..... 110 Halsted St, E Orange ..... [illegible]
Ohio Bailey Meter Co. ..... 2200 Victory Pkwy, Cincinnati ..... [illegible]
Pa Bailey Meter Co. ..... 20 Bala Ave, Bala-Cynwyd ..... [illegible]
Pa Bailey Meter Co. ..... 675 Greentree Rd, Pittsburgh ..... [illegible]
Tex Bailey Meter Co. ..... 5460 Times Blvd, Houston ..... [illegible]

BAILEY METER CO. LTD. ..... 5940 St. Catherine St, V, Montreal, Que, Can
Can Bailey Meter Co. Limited ..... 3235 Cavendish Blvd, Montreal, Que ..... [illegible]
Can Bailey Meter Co. Limited ..... Box 1697, Halifax, NS ..... [illegible]
Can Bailey Meter Co. Limited ..... 340-32nd Ave, SW, Calgary, Alb ..... [illegible]
Can Bailey Meter Co. Limited ..... 1045 W 6th Ave, Vancouver 9, B.C. ..... [illegible]
Can Bailey Meter Co. Limited ..... 139 Dowsey W, Don Mills, Ont ..... [illegible]
Can Bailey Meter Co. Limited ..... 2117 Carling Ave, Ottawa, Ont ..... [illegible]
Can Bailey Meter Co. Limited ..... 177 Lombard Ave, Winnipeg 2, Man ..... [illegible]

BAIRD-ATOMIC, INC. ..... 33 University Rd, Cambridge 38, Mass ..... [illegible]
Cal Baird-Atomic, Inc. ..... 2312 W Redondo Beach Blvd, Gardena ..... [illegible]
Cal Baird-Atomic, Inc. ..... 1405 Bayshore Blvd, San Francisco ..... [illegible]
Ga Baird-Atomic, Inc. ..... 3127 Maple Dr, NE, Atlanta 5 ..... [illegible]
Ill Baird-Atomic, Inc. ..... 10000 Roosevelt Rd, Westchester ..... [illegible]
Md Baird-Atomic, Inc. ..... 4826 Fairmont Ave, Bethesda 14 ..... [illegible]
Mich Baird-Atomic, Inc. ..... 30139 Mission, Livonia ..... [illegible]
NY Baird-Atomic, Inc. ..... 811 W Merrick Rd, Valley Stream ..... [illegible]
Ohio Baird-Atomic, Inc. ..... 2706 Northgate Rd, Westlake ..... [illegible]
Pa Baird-Atomic, Inc. ..... 413 Johnson St, Jenkintown ..... [illegible]
Tex Baird-Atomic, Inc. ..... 6626 Yale Blvd, Dallas 6 ..... [illegible]
Can Baird-Atomic, Inc. ..... 455 Gilmour St, Ottawa, Ont ..... [illegible]

BAKER CHEMICAL CO., J.T. ..... Phillipsburg, NJ ..... [illegible]
Cal J.T. Baker Chemical Co. ..... 232 N Lake Ave, Pasadena 1 ..... [illegible]
Ill J.T. Baker Chemical Co. ..... 402 N Michigan Ave, Chicago 11 ..... [illegible]
NY J.T. Baker Chemical Co. ..... 153 E 53 St, New York 17 ..... [illegible]

BALCO CAPACITORS DIV., BALCO RESEARCH LABS. ..... 45-52 Edison Pl, Newark 2, N.J. ..... [illegible]
Cal Lundis Associates ..... 5560 W Washington Blvd, Culver City
Conn Albon-Allison ..... Box 487, Meriden
Ga Perry Feurtz & Company ..... 777 Piedmont Terrace NW, Atlanta
NY Owen Lennendorf ..... 513 Cumberland Ave, Syracuse
Pa William Scholes ..... Box 184, Chelmsford
Tex Lenert Company ..... 3400 Harlem Houston
Can Electro Design ..... Suite 106-A Ottawa, Ontario

BALDWIN INDUSTRIAL CONTROLS Rockford, Kent, Eng ..... [illegible]
NY Atomic Accessories Inc. ..... 811 W Merrick Rd, Valley Stream ..... [illegible]

BALDWIN-LIMA-HAMILTON CORP. Engr. H & Philadelphia 42, Pa ..... [illegible]
Cal Baldwin-Lima-Hamilton Corp. ..... 1422 W 6th St, Los Angeles 17 ..... [illegible]
Cal Baldwin-Lima-Hamilton Corp. ..... 1000 16th St, San Francisco ..... [illegible]
DC Baldwin-Lima-Hamilton Corp. ..... 1000 Conn Ave, Washington 6 ..... [illegible]
Ill Baldwin-Lima-Hamilton Corp. ..... 427 Railway Exchange Bldg, Chicago 4 ..... [illegible]
Mo Baldwin-Lima-Hamilton Corp. ..... 1321 Locust St, St. Louis 3 ..... [illegible]
NY Baldwin-Lima-Hamilton Corp. ..... 500 Duke St, Schenectady ..... [illegible]
NY Baldwin-Lima-Hamilton Corp. ..... 60 E 42nd St, New York 17 ..... [illegible]
Pa Baldwin-Lima-Hamilton Corp. ..... 1600 Union Trust Bldg, Pittsburgh 19 ..... [illegible]

BARBIER, RENAUD & THOMSON, INC. ETS. ..... 16 rue Castel, Paris 10e, Fr

BARIUM & CHEMICALS, INC. ..... 4940 Erie St, Niagara Falls, Ohio ..... [illegible]

BARKER SALES CO. ..... 309 S Broad Ave, Ridgefield, NJ

BARKLEY & DEXTER LABS. INC. ..... 20 Frankfort St, Fitchburg, Mass ..... [illegible]

BARNES CO. W. F. & JOHN ..... 301 S Water St, Rockford, Ill ..... [illegible]
Ind W. I. Taylor ..... 120 Greenridge Rd, Lafayette ..... [illegible]

BARNES DEVELOPMENT CO. ..... 373 W Baltimore Pike, Lansdowne, Pa ..... [illegible]
Ala Specialized Electronic Corp. ..... 600 N 18th St, Birmingham ..... [illegible]
Cal W. E. Gates Co. ..... 2177 Glendale Blvd, Los Angeles ..... [illegible]
Cal W. K. Gates Co. ..... Box 849, Cupertino ..... [illegible]
Ill R. L. Kennedy Co. ..... 6733 N Olympic Ave, Chicago ..... [illegible]
Md C. F. Paddock ..... 8818 Georgia Ave, Silver Spring ..... [illegible]
Mass M. E. Caldwell Co. ..... 41 Lancaster Rd, Needham ..... [illegible]
Mich R. L. Kennedy Co. ..... 6733 N Olympic Ave, Chicago ..... [illegible]
NY E. E. Hughes Co. ..... 4008 Bergenline Ave, Union City ..... [illegible]
NY M. P. Andreas Co. ..... Fayetteville ..... [illegible]
NY E. E. Hughes Co. ..... 4008 Bergenline Ave, Union City, NJ ..... [illegible]
Pa Burke & Allman ..... 207 Lancaster Ave, Devon ..... [illegible]
Wash J. I. Boehr Co. ..... 521 W Galer St, Seattle 99 ..... [illegible]

BARNES ENGINEERING CO. ..... 30 Commerce Rd, Stamford, Conn ..... [illegible]
Cal Costello & Co. ..... 3700 S La Cienega Blvd, Los Angeles 16 ..... [illegible]
Fla W. A. Brown & Associates, Inc. ..... 301 Cypress Rd, Indian River City ..... [illegible]
Fla Barnes Engineering Co. ..... 500 N Orlando Ave, Cocoa Beach ..... [illegible]
Ind C. E. Snow Co. ..... 6012 Wisconsin Ave, Bethesda ..... [illegible]
Ind P. T. Gates Co. ..... 120 Harvard Dr, SE, Albuquerque ..... [illegible]
NY M. P. Andreas, Inc. ..... 210 Main St, Fayetteville ..... [illegible]
Ohio Sheldon Associates, Inc. ..... P.O. Box 97005, Cincinnati 27 ..... [illegible]
Ohio Sheldon Associates Inc. ..... 4317 N Main St, Dayton 5 ..... [illegible]
Pa C. E. Snow Co. ..... 618 Chestnut Ave, Philadelphia 36 ..... [illegible]
Tex Dunwoodie-Smith, Inc. ..... 5715 W Mockingbird Ln, Dallas ..... [illegible]
Utah P. T. Gates Co. ..... 510 S Main St, Salt Lake City 1 ..... [illegible]
Ger H. Dreher Associates, Inc. ..... Leopoldstrasse 37, Munich 23, W Ger

BARNES & BURNCKE, INC. ..... 230 E Ohio St, Chicago 11, Ill ..... [illegible]
DC Barnes & Burncke, Inc. ..... 10th & N St, Washington 6 ..... [illegible]

TERR	MANUFACTURERS SALES/OR REPRESENTATIVES OFFICES	TEL. NO.
Mich	Sutton & Sutcoske, Inc. ..... 107 Townsend, Midland	TEL-7758
NM	Sutton & Sutcoske, Inc. ..... 6040 Lion Ave. NE, Albuquerque	ALA-0889
	SARNSTEAD STILL & STERILIZER CO. ..... 84 Lonsville Ten. Boston 31, Mass	JAC-8400
Cal	Sarnstead Still & Sterilizer Co.	San Francisco TEL-0891
Cal	Sarnstead Still & Sterilizer Co.	Los Angeles RT1-0000
DC	Sarnstead Still & Sterilizer Co.	Washington DET-1142
Ill	Sarnstead Still & Sterilizer Co.	Chicago RCI-0170
Mich	Sarnstead Still & Sterilizer Co.	Detroit BR7402
NY	Sarnstead Still & Sterilizer Co.	New York City KIR-1007
Ohio	Sarnstead Still & Sterilizer Co.	Cleveland ACE-0882
Pa	Sarnstead Still & Sterilizer Co.	Philadelphia LOS-2100
	SAR-DAY PRODUCTS, INC. .. 209 25th St. Brooklyn 32, NY	
Cal	M. Stevens & Assoc. ..... 5311 W 6th St. Los Angeles	DUT-0913
Ill	Thomson-Angleman-Brown Inc. ..... 1142 N Lawndale Ave. Chicago	CHA-7855
	SARTY CONTROLS, INC. SARTY WRIGHT CORP. 700 Pleasant St. Watertown 72, Mass	WAL-1159
Cal	Sarty Controls ..... 1400 Flower St. Glendale	CHE-0881
DC	E. R. Hitchcock & Associates ..... 704 16th St. NW, Washington	EXS-0886
Fla	E. C. Raymond & Associates ..... Box 5315, Medwin Bldg. St. Petersburg 6	WA1-9986
Ill	The Derryment Corp. ..... 7000 W Grand Ave. Chicago	MAS-0500
Mass	School Associates, Inc. ..... 11 Mooney St. Lexington	VOS-5070
Minn	P. R. Hill Co. ..... 6110 Excelsior Blvd. Minneapolis	WEA-0737
Mo	Harris-Hanna Co. ..... 3014 S Brentwood Blvd. St. Louis	MAT-4820
NY	E. R. A. Inc. ..... 940 Great Neck Rd. Great Neck	HUB-3600
Can	Sarty Controls ..... 1266 Laird Blvd. Montreal, Quebec	RY-7142
	SARTOR INSTRUMENT CORP. 520 Monterey Pass Rd. Monterey Park, Cal	CUS-4291
Cal	Sartor Sales Co. ..... 350 S Atlantic Blvd. Monterey Park	ATP-3649
Cal	Sellhow Co. ..... 400 Market St. San Francisco 11	TUT-0713
Ill	General Mecon & Controls ..... 205 W Wacker Dr. Chicago 6	AND-7080
La	Oil & Gas Specialties Co. ..... 5202 4th St. Houston 24	UNI-8116
Md	G. Goodman Co. ..... 102 E 25 St. Baltimore 18	BEl-0070
Mass	Carr Sess. Co. ..... 68 Central St. Wellesley	CEL-7146
Mo	E. R. Miller Co. ..... 12117 Manchester Rd. St. Louis	TOS-8200
NY	Hale Equipment Corp. ..... 400 Grand Ave. Englewood, NJ	LOW-6611
Okla	Snyder Co. Inc. ..... 1402 E 6th St. Tulsa 19	GET-0135
Ore	Fryer & Co. Inc. ..... 2035 SW 58 Ave. Portland 1	CAS-0703
Pa	H. S. Jacobs & Assoc. ..... 810 Holdsworth Bld. Pittsburgh 3	WAl-6140
Tenn	Engineered Instrument Sales ..... 2217 Union Ave. Memphis 12	YAP-1273
	SAUK, INC. ..... 905 Huron Bldg. Cleveland 14, Ohio	CHE-3880
Cal	Sauk, Inc. ..... 727 W 7th St. Los Angeles 17	MAS-0207
Ind	Sauk, Inc. ..... 6040 Indianapolis Blvd. Hammond	WEl-6440
Mo	Sauk, Inc. ..... 101 S Meramec, Clayton 5	PAS-0247
Pa	Sauk, Inc. ..... 535 Gateway Center Bldg. S 1, Pittsburgh 22	COl-4150
Pa	Sauk, Inc. ..... 105 Town Center Rd. King of Prussia	LOS-1480
	SAUNCH & LOMB, INC. ..... 6002 Bausch St. Rochester 2, NY	LOS-3300
Cal	Saunch & Lomb, Inc. ..... 32 Jones St. San Francisco 2	CHO-1520
Cal	Saunch & Lomb, Inc. ..... 814 W 6th St. Los Angeles 14	MAS-1401
DC	Saunch & Lomb, Inc. ..... 1304 Eye St. Washington 5	NT-1818
Ga	Saunch & Lomb, Inc. ..... 70 Marietta St. NW, Atlanta	JAS-0721
Ill	Saunch & Lomb, Inc. ..... 740 W Washington Blvd. Chicago 6	STA-0032
Mass	Saunch & Lomb Inc. ..... 110 Fremont St. Boston	HUB-0020
Mich	Saunch & Lomb, Inc. ..... 20000 W Outer Dr. Dearborn	LOl-4000
Mo	Saunch & Lomb, Inc. ..... 2021 Olive St. St. Louis 08	CEl-1400
NY	Saunch & Lomb, Inc. ..... 208 8th Ave. New York 10	CEl-0400
Pa	Saunch & Lomb, Inc. ..... 1014 Chestnut St. Philadelphia 8	LOS-0831
	SEACH-BUSS CO. ..... 420 Lexington Ave. New York 17, NY	OSS-7434
Cal	J. W. Lazar Co. ..... 4400 W Jefferson Blvd. Los Angeles	REl-4170
Cal	M. H. Ellis & Associates ..... 1400 Keystone Blvd. San Francisco 24	ELA-7788
Ill	P. Jaeger Co. ..... 1740 George St. Chicago	PAS-4179
Mass	Hayes Pump & Machinery Co. ..... 100 Vine St. Somerville 43	MOS-0880
Minn	T. O. Bertram Co. ..... 2204 E 25th St. Minneapolis	PAS-6181
Mo	W. L. Pecan Machinery Co. ..... 3002 W Pine Blvd. St. Louis 8	JEF-0700
NY	L. McLeod ..... 130-140 Van Cortlandt Ave. Schenectady	FRA-2141
Ohio	P. M. Kline & Associates ..... 2000 E 22nd St. Cleveland 15	CEl-1171
Ohio	R. W. Bogan Co. ..... 800 Water St. Akron 8	PCO-0221
Pa	Hall Corp. ..... Hatboro	OSl-3000
Pa	J. Guy Griffith Co. ..... 1251 Union Trust Bldg. Pittsburgh 19	ATl-0884
Can	G. F. Seeley & Sons, Ltd. ..... 22 Redmont St. Toronto 22, Ont	EMl-4610
	SEAN, JOHN DIV. PMC ..... 1300 S Cedar St. Lansing, Mich	PEA-9671
Cal	J. Sean, Western Div. PMC	San Jose
	SECRTEL CORP. ..... 220 Bush St. San Francisco 4, Cal	DOl-4022
Cal	Sechtel Corp. ..... 615 S Flower St. L A 17	MAS-0721
NY	Sechtel Corp. ..... 405 Lexington Ave. NY 17	MUT-7130
Tex	Sechtel Corp. ..... 1300 Main St. Houston 2	CAS-2040
Aus	Sechtel Pacific Corp. Ltd. ..... 2 City Rd. Melbourne S.C. 4, Victoria	GY7200
Can	Canadian Sechtel Ltd. ..... 55 King St. W. Toronto 1, Ont	EMl-3261
Eng	Sechtel International, Ltd. ..... Stow Road St. London, W 1	HYD0002
Fr	Sechtel International Co. ..... 97 Ave. Pierre 1, de Indie, Paris 8	ELY4242
	SECKMAN INSTRUMENTS INC., SYSTEMS DIV. 2400 Harbor Blvd. Fullerton, Cal	
Cal	Seckman Instruments Inc. ..... 1117 California Ave. Palo Alto	DAS-5411
Ill	Seckman Instruments Inc. ..... 7200 N Lincoln Ave. Lincolnwood	ATr-0220
Md	Seckman Instruments Inc. ..... 7524d Wisconsin Ave. Bethesda	OLD-1884
NJ	Seckman Instruments Inc. ..... 25 Hwy 22 @ Summit Rd. Mountainside	ADb-7880
	SECKMAN & WHITLEY, INC. ..... 902 E San Carlos Ave. San Carlos, Cal	LYl-8243
	SELCO MFG. CORP. DIV. SENSE ELEC. MFG. CORP. 180 Pennsylvania Ave. Paterson, NJ	LAS-2700
Cal	A. T. Andreski ..... 400 Market St. San Francisco 11	EXS-4844
Colo	Western States Equip Sales Co. ..... 140 Broadway, Denver 3	PEO-4047
Ohio	H. W. Fish & Co. ..... 7005 Montgomery Rd. Cincinnati 30	TWl-5400

TERR	MANUFACTURERS SALES/OR REPRESENTATIVES OFFICES	TEL. NO.
Tex	J. B. Hinshaw ..... 5900 Dodge La. Houston 24	CUY-5971
Wash	H. D. Fowler Co. Inc. ..... 9th Ave. S & Lane St. Seattle 14	MAS-4800
	SELFAS CORP. ..... Daytona Beach, Fla	CL3-4400
Cal	E. R. Thompson ..... 130 E Wilshire Ave. Fullerton	TEl-0040
Minn	F. Pearson ..... 9401 Bloomington Ave. Minneapolis 8	PEr-5000
	SELGE & CIMAE NUCLEAIRE STE. 35 rue des Colonies, Brussels 1, Belg	12.60.30
	SELONUCLEAIRE (SOC. SELGE POUR L'INDUSTRIE NUCLEAIRE) 35 rue des Colonies, Brussels 1, Belg	(02) 12.60.30
Ital	Studio Applicazioni Nucleari ..... 13 Piazza della Repubblica, Milan	63.71.07
	SELL TELEPHONE MFG. CO. INSTRUMENTATION & CONTROL 32 Boulevards Anvers, Belgium	27.70.35
Aust	Standard Tele n. Tele A. G. ..... Czeija, Nitsl & Co - Vienna	
Den	Standard Elek Aktieselskab ..... Copenhagen	
Eng	Standard Tel. & Cables Ltd. ..... Aldwych 60, London W.C2	
Fr	Lab Central de Telecommun. ..... 46 ave de Breteuil-Paris 7	
Ger	Standard Elektrik A. G. ..... Stuttgart-Zuffenhausen	
Ital	F.A.C.E. Standard ..... Cinella Pasnin 3195, Milan	
Neth	N.V.S.M. ..... 100-102 Schiedamse 's Gravenhage	
Nor	Standard Telefon og Kabelfabrik ..... Oslo	
Port	Standard Electrica S.A.R.L. ..... Lisbon	
Spn	Standard Electrica S.A.E.L. ..... Madrid	
Swed	Standard Radio & Tele AB ..... Stockholm	
Swit	Standard Tele & Radio S.A. ..... Zurich	
	SELIGMAN SMELTING & REFINING WORKS, INC. ..... 222 Belmont Ave. Brooklyn 7, NY	BU-4080
	SELOCK INSTRUMENT CORP. ..... 113-45 14th Ave. College Point 56, NY	HIS-4200
Ala	Aero-Space Laboratories ..... Huntsville	HU-3441
DC	Selock Instrument Corp. ..... 1835 "I" St. NW, Washington	GE0270
	SENSE COMPUTER DIV. SENSE CORP. ..... 3020 Aiken Vista St. Los Angeles 45, Cal	OSS-3440
Cal	Sensitr Computer Div. ..... 501 S La Cienega Blvd. Beverly Hills	CLS-0450
Cal	Sensitr Computer Div. ..... 1300 Broadway, Oakland 12	GLS-0006
Colo	Sensitr Computer Div. ..... 655 Broadway, Denver 2	ALA-1400
DC	Sensitr Computer Div. ..... 1000 Connecticut Ave. NW, Washington 6	STD-6221
Ill	Sensitr Computer Div. ..... 919 N Michigan Ave. Chicago 11	MIS-0000
Mass	Sensitr Computer Div. ..... 897 Boylston St. Boston 16	COD-0210
Mich	Sensitr Computer Div. ..... 13040 W Eight Mile Rd. Detroit 21	ED6-0700
Mo	Sensitr Computer Div. ..... 3400 Broadway, Kansas City 11	VAl-0400
NY	Sensitr Computer Div. ..... 206 E 42nd St. New York 17	OXO-0000
Ohio	Sensitr Computer Div. ..... 68 Public Square, Cleveland 13	CHE-7780
Tex	Sensitr Computer Div. ..... 1521 Bryan St. Dallas 1	RY7-0000
	SENSE CORP. SENSE-PACIFIC DIV. 11400 Sherman Way, N Hollywood, Cal	PEG-3200
Ala	The Sensitr Corp. ..... 2000 Memorial Pkwy. S, Huntsville	HU3-0471
Colo	The Sensitr Corp. ..... Box 4017, Colorado Springs	MEA-5000
DC	Sensitr-Pacific Div. ..... 1700 "K" St. NW, Washington	FE3-4000
Mass	Sensitr-Pacific Div. ..... 134 Waltham St. Lexington 73	VOS-7000
NY	Sensitr-Pacific Div. ..... 111 W 40th St. New York 18	CH-0000
NY	Sensitr International Div. ..... 206 E 42nd St. New York 17	MUS-1100
Ohio	Sensitr-Pacific Div. ..... 1000 Dalman Bldg. Dayton 2	BAS-0240
Wash	The Sensitr Corp. ..... 2400 1st Ave. S, Seattle 8	PAS-0100
	SENSE CORP. SENSE PRODUCTS DIV. 401 Sensitr Dr. South Bend, Ind	CE3-4141
	SENSE CORP. CINCINNATI DIV. 1124 Vernon Rd. Cincinnati 2, Ohio	EL1-2222
	SENSE CORP. ECLIPSE PIONEER DIV. Teterboro, NJ	ATS-2200
NY	Sensitr International Div. ..... 206 E 42nd St. New York 17	MUS-1100
Can	Aviation Electric Limited ..... 200 Laurentian Blvd. Montreal, Que	RA-5811
	SENSE CORP. FILTER DIV. Box 138, Indian Ridge, Mich	JOS-2200
Cal	Sensitr Filter Div. ..... 14000 Vinnary Blvd. Van Nuys	STS-5070
	SENSE CORP. FREZ INSTRUMENT DIV. 1404 Taylor Ave. Baltimore 4, Md	VAS-4300
Cal	Sensitr-West Coast Div. ..... 117 Providencia Ave. Burbank	VIS-2040
	SENSE CORP. INDUSTRIAL CONTROLS SECT. 21220 Wyoming Ave. Detroit 37, Mich	JOS-5000
Cal	Sensitr Industrial Controls Sec. ..... 500 S LaCienega Blvd. Beverly Hills	CLS-0400
Conn	Sensitr Industrial Controls Sec. ..... 600 Pantigoss Ave. West Hartford	AD6-1007
Tex	Sensitr Industrial Controls Sec. ..... Box 30405, Dallas 24	FLS-4070
	SENSE CORP. MONITOR DIV. South Montrose, Pa	MO270
Cal	Sensitr West Coast Div. ..... 117 E Providencia Ave. Burbank	VIS-2040
	SENSE CORP. PIONEER-CENTRAL DIV. Davenport, Iowa	324-4161
Cal	Sensitr-West Coast ..... 117 E Providencia Ave. Burbank	VIS-2040
NJ	Eclipse-Pioneer, Sensitr Corp. ..... Teterboro	ATS-2000
	SENSE CORP. RED BANK DIV. ELECTRON TUBE PRODS. ..... Eatontown, NJ	LE-3000
Cal	The Sensitr Corp. ..... 117 E Providencia Ave. Burbank	VIS-2040
DC	The Sensitr Corp. ..... 1700 K St. Washington	FE3-4000
Ill	The Sensitr Corp. ..... 20045 York Rd. Elmhurst	BR3-2000
Mass	Sensitr Corp. ..... 134 Waltham St. Lexington	VOS-7000
Ohio	The Sensitr Corp. ..... 1000 Dalman Bldg. Dayton	BAS-0240
Can	Computing Devices of Canada ..... Box 508, Ottawa 4, Ontario	TAS-0711
Por	Sensitr International ..... 206 E 42nd St. New York, NY	MUS-1100

TERR	MANUFACTURERS SALES/OR REPRESENTATIVES OFFICES	TEL. NO.
	SENSE CORP. RESEARCH LABS DIV. Smithfield, Utah	SU7-2300
	SENSE CORP. SCINTILLA DIV. Sidney, NY	LE3-4911
Cal	Sensitr Corp. ..... 117 E Providencia Ave. Burbank	
Cal	Sensitr Corp. ..... 320 El Camino Real, San Carlos	
DC	Sensitr Corp. ..... 1701 "K" St. NW, Washington 6	
Fla	Sensitr Corp. ..... 5120 A S Colonial Dr. Orlando	
Ill	Sensitr Corp. ..... 4104 N Harlem Ave. Chicago 34	
Kan	Sensitr Corp. ..... 3rd & Main St. Wichita	
NJ	Sensitr Corp. ..... 546 Cedar La. Teaneck	
Tex	Sensitr Corp. ..... 5000 Inwood Rd. Dallas 35	
Wash	Sensitr Corp. ..... 2400 1st Ave. S, Seattle 8	
	SENSE CORP. SYSTEMS DIV. Ann Arbor, Mich	HE3-7750
	SENSE ERICSON U.K. LTD. High Church St. New Basford, Not. Eng	NOT 75115
Ohio	Sensitr Corp. Cincinnati Div. ..... 21212 Wayne Rd. Cincinnati	
Aust	R. I. T. Fayne pty. Ltd. ..... 295, Bridge Rd. Richmond, Victoria	
Swit	Omni Ray A.G. ..... Dufourst. 18, Zurich 8	
	SENTRY SCIENTIFIC CO. ..... 2011 7th St. Berkeley 10, Cal	TH3-4280
Cal	Fielding ..... Box 585, Tustin	LU-0855
Cal	Fielding ..... 2011 - 7th St. Berkeley 10	TH3-0831
	SERGEN PIPESUPPORT CORP. 30 Church St. New York, NY	WO4-4080
Cal	Sergen Pipesupport Corp. ..... 100 W 6th St. Los Angeles 14	MAS-0040
Colo	L. A. Christopher Co. ..... Box 97, Capitol Hill Sta. Denver 6	KEN-5400
Fla	Pan American Vacuum Co. Inc. ..... 3100 La Jonne Rd.	WA4-0100
Ga	E. L. Ruff & Assoc. Inc. ..... Box 18017, Atlanta 5	GY7-0333
Ill	Sergen Pipesupport Corp. ..... 1 N La Salle St. Chicago 2	FRO-3110
La	A. J. Harris Co. ..... 400 Baker Bldg. New Orleans 12	TUR1188
Mass	W. S. Parsons Co. ..... Box 277, Needham 92	HE4-0290
NC	Brown & Morrison ..... Box 4207, Charlotte 4	EDG-0774
Okla	Dave Bagwell Co. ..... 1740 E 6th St. Tulsa 4	LUS-5871
Pa	Sergen Pipesupport Corp. ..... 600 William Penn Pl. Pittsburgh	COl-5313
Tex	Alliger & Sears Company ..... Box 5227, Houston 1	CAS-0800
Wash	J. H. Morris Co. Inc. ..... 422 1st Ave. W, Seattle 99	ATW-0322
	SERK & CO. LTD., F.W. CONTROL DIV. Bond Case, 9 Clarendon Rd. London SW19, England	01.2222
Eng	F. W. Serk & Co. Ltd. ..... Trafford Park M. Manchester 17	TRA2000
Scot	F. W. Serk & Co. Ltd. ..... Kelvin Ave. Hillington Ind. Glasgow SW 2	HAS7040
	SERKELEY DIV. SECKMAN INSTRUMENTS, INC. 2200 Wright Ave. Richmond, Cal	LA4-7770
Cal	V. T. Rapp Co. ..... 3407 Parkman Ave. Los Angeles 34	BU7-0204
Ga	Murphy & Cole ..... 3110 Peachtree Rd. NW, Atlanta 5	TR5-0000
Ill	Sidgwy Associates ..... 6100 W North Ave. Chicago 39	TUS-0715
Minn	Roger Instrument Sales Co. ..... 40 Pond St. Brooklyn 37	BU2-0004
NJ	Gawler-Kemp Co. ..... 170 Eagle Rock Ave. Roseland	CAS-0340
NY	Hill Associates, Inc. ..... 960 Citizens Ave. S. Rochester 20	GR-0000
Wash	R. S. Drake Associates ..... 1027 Norman St. Seattle 44	EAS-0345
	SERMAND CO. ..... Box 282, Two Rivers, Wis	4881
	SERVEL GRIES CO. ..... Box 302, St. 1, Arvada, Colo	BR-3840
	SERVELLUM CORP. ..... Box 1402, Reading, Pa	
Cal	Servellum Corp. ..... 401 N Brand Blvd. Glendale 4	CHE-0884
Cal	E. I. Brooks Co., Inc. ..... 6001 Telegraph Rd. Los Angeles 22	BAS-0401
Ill	Servellum Corp. ..... 205 W Wacker Dr. Chicago 6	AND-0800
Mass	Servellum Corp. ..... 520 Washington St. Springfield	BEA-5202
Mich	Servellum Corp. ..... 8040 Van Born Ct. Dearborn 8	CHE-0810
Minn	Elder Equipment Co. ..... 1107-09 S 3rd St. Minneapolis 15	
Mo	J. A. Crowe & Associates ..... 1021 Londe St. St. Louis 15	
NY	Servellum Corp. ..... 475 5th Ave. New York 17	MUS-0970
Ohio	Servellum Corp. ..... 14700 Detroit Ave. Cleveland	ACl-5900
Ohio	Servellum Corp. ..... 800 W 1st St. Dayton 2	BAS-1400
Ohio	Servellum Corp. ..... 250 W Commerce St. Youngstown	RE6-0314
Pa	Servellum Corp. ..... 1017 Pennsylvania Blvd. Philadelphia 3	LOS-0971
	SERVELLUM SMELTING CO. LTD. 36-38 Southampton St. London WC 2 Eng	TEM0020
	SETHLEHEM CORP. ..... 220 W 2nd St. Bethlehem, Pa	BE-4000
Cal	E. V. Roberts & Assoc. ..... 5009 W Washington Blvd. Los Angeles	WEA-5540
Colo	R. Hyde ..... 800 S Tejon St. Denver	WEA-5420
Del	J. I. Hudson ..... 110 Cedar St. Lyndhold, Wilmington 5	GLA-7200
Fla	W. A. Rowe ..... 201 Cypress Rd. Indian River City	AM7-0421
Mich	L. E. Angel ..... 13225 Michigan Ave. Dearborn	LUS-0900
NJ	R. H. Dellman ..... 270 Cherokee Ct. Westfield	ABS-0774
NY	D. Mosse ..... 50 Delgarment Ct. Buffalo 22	SP5000
Tex	L. Cobb ..... 213 N Pearl, Dallas 1	RY-1000
Va	R. Rolando ..... 3000 Mt. Vernon Ave. Alexandria	
Wash	A. E. Couch ..... 12000 NE 1st, Bellevue	GLe-3400
Can	F. R. Upton ..... 4100 Verrillo St. Montreal, Quebec	DUN0001
For	L. Hart ..... 18 E 40th St. New York, NY	MUS-0800
	BETHLEHEM STEEL CORP. ..... 701 E 3rd St. Bethlehem, Pa	OW3-2434
Cal	Bethlehem Steel Corp. ..... 160 California St. San Francisco 10	YU1-0102
Ga	Bethlehem Steel Corp. ..... 6000 S Boyle Ave. Los Angeles 54	LUD-0241
Ga	Bethlehem Steel Corp. ..... 55 Madison St. Atlanta 3	JAS-0313
Ill	Bethlehem Steel Corp. ..... 2700 Prudential Bldg. Chicago 1	MOH-5400
Md	Bethlehem Steel Corp. ..... 300 St. Paul Pl. Baltimore 2	MUS-0700
Mass	Bethlehem Steel Corp. ..... 10 Federal St. Boston 10	LIS-0710
Mo	Bethlehem Steel Corp. ..... 8 Central & Dunkerson Ave. St. Louis 5	PAS-0200
NY	Bethlehem Steel Corp. ..... 270 Park Ave. New York 22	MUS-4000
Pa	Bethlehem Steel Corp. ..... 1617 Pennsylvania Blvd. Philadelphia 3	LOS-1100
Pa	Bethlehem Steel Corp. ..... 1000 Oliver Bldg. Pittsburgh 22	GE1-0900
Tex	Bethlehem Steel Corp. ..... 2100 Citizens Dr. Houston 1	CHO-7411
Wash	Bethlehem Steel Corp. ..... 1001 S Marginal Way, Seattle 54	WEl-1100

SIMPLE CO. JAMES G. ..... 1316 Arch St. Philadelphia 7, Pa LO4-1600
Cal J. G. Biddle Co. ..... 13000 Power Rd. Los Alamitos GD9-1000
Fla A. Fyler Agency ..... 4550 Laguna St. Coral Gables HO5-1042
Ga O. V. Scott, Jr. & Assoc. ..... 366 Tuckwood Dr. NW, Atlanta 13 ..... JA3-0007
Minn Cooperstein & Bradford ..... 870 Hillside Ave. Needham Hts. 94 ..... HO4-0410
Mich The Sutylin Co. ..... 4534 N Woodward Ave. Royal Oak LI8-0810
Minn Fishney & Hize ..... 1005 Wheeler Ave. Minneapolis 5 ..... LN8000
Mo The C. B. Fell Co. ..... 317 N 11th St. St. Louis 1 ..... CH3-0400
NY J. G. Biddle Co. ..... 15 Alden St. Cranford, NJ BR8-0800
NC Bamm, Wallace & Co. ..... 116 E 4th St. Charlotte 2 ..... EM4-0564
Ohio J. G. Biddle Co. ..... 1100 Delmont Dr. Cleveland 24 421-1300
Tex L. Lipscomb & Assoc. ..... Box 7004, Dallas FL9-1001
Wash Instrument Lab. Inc. ..... 604 Elliott Ave. W, Seattle 99 ..... AT3-0800

SHELDON CO. ..... Box 705, New Haven 3, Conn

SHUG CO., CARL H. ..... 1647 14th St. Santa Monica, Cal EP5-0710

SINGMAN PUMP CO. ..... 3000 NW Front Ave. Portland 10, Ore CA3-7071
Cal Kingman Pump Co. ..... 600 Sun Bldg. San Francisco 4 ..... GE1-0312
Cal Kingman Pump Co. ..... 2700 W 6th St. Los Angeles 57 ..... WO3-1300
Colo Kingman Pump Co. ..... 600-6 Symes Bldg. Denver 2 ..... TA5-4603
Ill Kingman Pump Co. ..... 407 S Dearborn St. Chicago WE3-4800
Minn Kingman Pump Co. ..... 10 Tuscaret St. Rosen 5 ..... LA8-0773
Mo Power Machinery Co. ..... 6005 Brookside Plaza, Kansas City 13 ..... EM8-1300
NY Kingman Pump Co. ..... 420 Lexington Ave. New York City LE3-0304
NC T. C. Hayward & Co. ..... 530 E Morehead St. Charlotte FF7-0570
Ohio Power Machinery Co. ..... 3000 E Memorial, Tulsa 5 ..... MA7-0116
Pa J. M. Duke ..... 1310 Tuscar St. Pittsburgh 35 ..... LE1-0340
BC Kingman Pump Co. Ltd. ..... 1660 E Broadway, Vancouver CY3-0464
Can Kingman Pump Co. Ltd. ..... 406 Yonge St. Toronto WA6-7400

SIG-RAD LABORATORIES ..... 1207 S 32nd St. Richmond, Cal RE4-4330

SIG-SCIENCE LABS. ..... 12300 Santa Monica Blvd. LA 25, Cal GR8-4051

SIMS LABORATORIES INC. ..... 17 W 45th St. New York 23, NY PL7-4471

SIED ELECTRONIC CORP. ..... 3600 Aurora Rd. Cleveland 39, Ohio
Cal Van Gorn Co. ..... 11004 Commerce St. Woodland Hills EM-0101
Cal Van Gorn Co. ..... 1710 Los Altos Ave. Los Altos WH6-7300

SIMBACK RADIO CO. INC. ..... 145 Hudson St. New York 13, NY WO6-3077

SIMOP & CO., J. ..... Platinum Works, Malvern, Pa
Ill J. Bishop & Co. ..... 116 S Michigan Ave. Chicago AN3-4800
NY J. Bishop & Co. ..... 597 5th Ave. New York YU6-9715

BLACK SIVALLS & BRYSON INC. 7300 E 12 St. Kansas City 26, Mo BA1-7300
Cal Black, Sivalls & Bryson, Inc. ..... 700 N Highland Ave. Los Angeles WE1-1705
Cal Black, Sivalls & Bryson, Inc. ..... 1400 Bay Shore Blvd. San Francisco BR3-0800
Colo Black, Sivalls & Bryson, Inc. ..... Commercial Bldg. Denver AC3-8205
Ill Black, Sivalls & Bryson, Inc. ..... 221 N LaSalle St. Chicago RE3-0355
La Black, Sivalls & Bryson, Inc. ..... 900 Civic Center Bldg. New Orleans EM4-8469
Mich Black, Sivalls & Bryson, Inc. ..... 650 Stephenson Bldg. Detroit TR-1790
NY Black, Sivalls & Bryson, Inc. ..... 500 Niagara Falls Blvd. Buffalo 14 ..... TR-3800
NY Black, Sivalls & Bryson, Inc. ..... 60 W 40th St. New York CO5-8884
Ohio Black, Sivalls & Bryson, Inc. ..... 600 E 6th St. Tulsa LU5-8841
Pa Black, Sivalls & Bryson, Inc. ..... P.O. Box 383, Wayne MU8-3000
Tex Black, Sivalls & Bryson, Inc. ..... 11015 E Main, Houston 20 ..... MA8-1400
Tex Black, Sivalls & Bryson, Inc. ..... 1406 Turner Bldg. Dallas 1 ..... RE-3130

BLICHMAN, INC., S. ..... 7900 Gregory Ave. Weehawken, NJ UN5-5800

BOBSON & FILS, STE. S. ..... 14 bis, Rue Basse Papin, Puteaux (Seine), Fr LOMB-37
NY Hermanad, Inc. ..... Lechmere TS4-0800
Eng F. W. Allen & Co. ..... 103 Liverpool Rd. London N 1 ..... NO4005
Ital G. A. Minchrope Sensitrole ..... Via Pergolesi 30, Milan 221.221/22

BORNA & CO., INC., U.S. ..... 575 Sacker St. San Francisco 5, Cal EX3-1296
BC B. D. Dehne & Co. Ltd. ..... 805 W Broadway, Vancouver TR9-4047
Can Integrated Consultants Ltd. ..... 6484 Sherbrooke St. W Montreal, Que HU6-3000
Ger Ing Fichner ..... Dendener 27/33, Sonnigen-Feuerbach 0 00 00

BOLTON & SONS LTD., THOMAS 100 Regent St. London, W.1. Eng RE4427
Mass Atlantic Alum. & Metal Div. Inc. ..... Page Blvd. Springfield HE5-0021
Belg Cotmex S.A. ..... 50 rue Souverain, Bruxelles, 5 ..... 15.05.00
Can Drummond McCall & Co. Ltd. ..... 6266 Fairway St. Lachine, Que 501-4001
Eng T. Bolton & Sons Ltd. ..... Mossley Copper Wks. Widnes, Lancs ..... WIDNES
Fr Pierre Meyer ..... 16, Rue Marcel, Paris 16e TAE0-16
Ger G.A. Gelbenberg ..... 45 Lerchenh. Str. Frankfurt 00 21 40
Holl W. Van Houten & Zoon C.V. ..... Hoover 1, Rotterdam 1 ..... 11.21.39
Ital Leiko Mercurmat ..... Via Lovanio 6, Milan 65.04.69
Swed Adolfsa A.C. ..... P.O. Box 402, Zurich 22

BONAC LABS. INC. ..... Salem Rd. Beverly, Mass WA5-0800

BONNARD & GASDEL ..... Ave de la Gare 10, Lausanne, Suis 021 22.00.21

BONNEY-FLOYD CO. ..... 651 Marion St. Columbus 7, Ohio HE-7400
NY U.S. Wilkinson ..... 45 Rockefeller Plaza, New York 20
Pa D. Smith ..... 427 W Sheridan Ave. Altoona
Pa F.E. Parks ..... 475 Grandview St. Pittsburgh 11

BONNET FORGE & TOOL WORKS ..... Cedar & Meadow Sts. Allentown, Pa HE5-4701

BONE-ALLEN APPLIED RESEARCH, INC. ..... 1051 Washington St. Glenview, Ill PA6-7080

BORDEN CHEMICAL CO. ..... 350 Madison Ave. New York 17, NY MU7-4500

BORG-WARNER CONTROLS DIV. BORG-WARNER CORP.
3200 Mangat Blvd. Santa Ana, Cal 836-0201
Cal E. V. Roberts & Associates ..... 5000 W Washington Blvd. Los Angeles WE5-5543
Colo Williams & Associates, Inc. ..... 6001 S Albion St. Denver HU6-0403
Ill R. E. Brown, Inc. ..... 6001 W Lake St. Chicago EM6-0700
Md Wavecomb Associates ..... 700 Dauphine Rd. Baltimore TU9-1345
Mass Associated Electronics, Inc. ..... 305 Pleasant St. Worcester PL5-8101
Mich Burow-Cowan & Co. ..... 32100 Grand River Ave. Detroit KE3-7700
Mo Lee Mark Associates, Inc. ..... P.O. Box 8073, Kansas City HE8-0013
NJ C. C. Engel & Associates ..... 510 S Broad St. Ridgewood HE3-0001
NY Gould Associates, Inc. ..... P.O. Box 6002, Rochester EM4-3000
NC J. L. Highsmith & Co. ..... 3700 Monroe Rd. Charlotte FF7-5540
Ohio Scott & Steffes, Inc. ..... 1000 Euclid Ave. Cleveland TO1-3050
Tex J. T. Schoenmaker Co. Inc. ..... 6026 Sheffield Ave. Dallas LA6-7200

BORGNE PRODUCTS, INC. ..... 600 E Dayton Ave. Pomona 20, Calif LY3-0973

BORSCH CORP., ROBERT ..... 8-25 Crescent St. LIC 1, NY ST6-8546
Cal R. Borsch Corp. ..... 555 7th St. San Francisco 3 ..... UN1-5860

BOSTON INSULATED WIRE & CABLE CO. ..... 65 Bay St. Boston, Mass CO5-3704
Ala Emery Design & Equipment Co. ..... Box 9433, Birmingham TE1-1540
Ariz Paul Schoeffler Associates ..... 6025 S Wilshire Dr. Tucson AZ8-6170
Cal Electronics Accessories, Inc. ..... 1750 N Lotus, Los Angeles 58 ..... HO9-1414
Fla Emery Design & Equipment Co. ..... Box 587, Bradenton EP1-1767
Ill Wilson, Repsch & Cahill ..... 6400 W Division, Chicago 51 ..... AU9-7303
Minn G. Williamson ..... 84 Seven St. Hutch GL8-7555
Mo Thunderbird Eng. Sls. & Service ..... 5038 Main St. Kansas City WE1-8770
NC Bill Henry ..... Box 6075, Charlotte 7 ..... FE5-8868
Ohio Jack E. Porter ..... 199 Columbus St. Chagrin Falls CE7-3040
Tenn Simmons Sales Co. ..... 1015 Terry Circle, Memphis JR6-7207
Tex Planning Engineering Service ..... 7001 Glen Hills Rd. Ft. Worth 11 ..... AT4-3000
Can BIW Ltd. ..... 110 Shaw St. Hamilton, Ontario JA5-7151

BOSTWICK ASSOCIATES INC. ..... 110 E 23rd St. New York 22, NY PL5-8040

BOSWORTH, INC., NATHANIEL ..... 6135 Magnolia Ave. Riverside, Cal OV4-1700
Conn Gerber Sales Co., Inc. ..... P.O. Box 5015, New Haven SP1-8879
Ind R. O. Whitsell & Assoc. ..... 6000 E Washington St. Indianapolis 19 ..... FL9-8574
Md T. H. Cline Co. ..... 51 W Pennsylvania Ave. Towson 4 ..... VA5-4445
Minn Gerber Sales Co. Inc. ..... 40 Pearl St. Brooklyn 47 ..... SP5-0435
Minn F. S. Hill Co. ..... 6110 Excelsior Blvd. Minneapolis 16 ..... WE3-0707
NJ E. E. Hughes Co., Inc. ..... 4000 Bergenline Ave. Union City UN7-8004
NY R. C. Johnson Agencies, Inc. ..... 402 Niagara Falls Blvd. Buffalo 18 ..... TF5-4501
NY R. C. Johnson Agencies, Inc. ..... Box 88, Brandywine Sta. Schenectady FR4-5841
Ohio R. O. Whitsell & Assoc. ..... P.O. Box 37777, Cincinnati 37 ..... MI1-8310
Pa E. E. Hughes Co., Inc. ..... 101 N 22nd St. Philadelphia 4 ..... EV6-8130
Tex Sayco/Electronics Products Co. ..... P.O. Box 12071, Dallas 39 ..... FL1-4003
Can B-O-S Associates, Ltd. ..... 1470 Don Mills Rd. Don Mills, Ont HA4-6420

BOURNS, INC., TRIMPOT DIV. ..... 6135 Magnolia Ave. Riverside, Cal OV4-1700
Ariz Hyde Electronics Co. ..... 300 S Lipan St. Denver 23 ..... WE6-8468
Fla V. Ave McCarvey Co. ..... 3400 N Decatur Rd. Decatur, Ga GR4 2440
Ill Gessner & Clark Co. ..... 6004 N Western Ave. Chicago 45 ..... RO4-0232
Mich A.D.M. Sales, Inc. ..... 16710 Parlane Ave. Detroit 35 ..... UN3-1300
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NY W. R. Sweet ..... 5214 Bellevue Ave. Syracuse 4 ..... GR8-5141
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Pa Sanday-O'Brien ..... 15 Forest St. Doylestown, PA HA6-4013
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Mo J. Dunlap Co. ..... 600 Scott, St. Louis 10 ..... TO6-0300
NJ F. J. Hartley ..... Rutherford GE3-4200
NY Bowmar Instrument Corp. ..... 200 Plainview Rd. Hicksville WA7-3000
NY R. G. Klein ..... 50 Conway Rd. Pittsford LO6-4400
Tex Southwest Electronic Industries ..... The Meadows Bldg. Dallas 6 ..... EM8-1071
Wash E. F. Butler Co. ..... P.O. Box 1021, Seattle 55 ..... AT4-0720
Can Associates Engineering Funds, ... 147 Hymus Blvd. Pte. Claire, Que OX7-0210

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Ill R. C. Wynnson & Assoc. ..... 600 N Michigan Ave. Chicago MO4-1894
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Mich Hamelen, Jensen & Co. ..... 3000 W Grand Blvd. Detroit TR1-4000
Mo Automatic Gen'l Electronic Sls. ..... 6300 S Troost, Kansas City DE3-8200
NY BBA Inc. ..... 340 Great Neck Rd. Great Neck HU3-9000
NY R. C. Johnson Agency ..... 11 Mt. Hope Ave. Rochester HA6-1090
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Minn Hamilton & Boyle Assoc. Inc. ..... 3000 Republic Ave. Minneapolis 26 ..... WO2-7021
NJ J. A. Maguire & Co. ..... 136 N 7th St. Camden 2 ..... WO8-0110
NJ Murray Sales Co. ..... 604 Central Ave. E Orange OR6-0020
NY F. F. Smith ..... 4 Morton Rd. Bronx OR-0046
Ohio J. H. Cinch ..... Box 908, Cleveland 28 ..... PR6-0042
Utah Denver Engineering Sales ..... Beason Bldg. Salt Lake City 11 ..... EL8-1300
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Pa Bridgeport Brass Co. ..... 818 E Lycoming St. Philadelphia ER-3000
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Mass	Chicago Bridge & Iron Co. 10 Franklin St. Boston	HAM-0442
Mich	Chicago Bridge & Iron Co. Lafayette Bldg. Detroit	WOS-0035
NY	Chicago Bridge & Iron Co. 105 Broadway, New York	COY-5000
Ohio	Chicago Bridge & Iron Co. 55 Prospect Ave. Cleveland	CHI-1210
Okla	Chicago Bridge & Iron Co. 5051 E 51st St. Tulsa	HU-5511
Pa	Chicago Bridge & Iron Co. 6 Penn Center Plaza, Philadelphia	LOc-5520
Pa	Chicago Bridge & Iron Co. 801 Grant St. Pittsburgh	GRi-5540
Tex	Chicago Bridge & Iron Co. C & I Life Bldg. Houston	CAS-4435
Utah	Chicago Bridge & Iron Co. 400 W 17th South, Salt Lake City	HU4-5561
	CHICAGO DEVELOPMENT CORP. 5959 47th Ave. Riverdale, Md	AFJ-2871
	CHICAGO GASKET CO. 7271 W Bush Ave. Chicago 32, Ill	RIG-7840
Iowa	Silco Equipment Co. Box 8866, Kansas City 15, Mo	VAR104
Kan	Silco Equipment Co. Box 8866, Kansas City 15, Mo	VAR104
Minn	Dygert Co. 2020 W 56th St. Minneapolis 24	WEb-7704
Mo	Silco Equipment Co. Box 8866, Kansas City 15	VAR104
Neb	Silco Equipment Co. Box 8866, Kansas City 15, Mo	VAR104
Okla	Silco Equipment Co. Box 8866, Kansas City 15, Mo	VAR104
	CHICAGO TRANSPARENT BAG CO. 7227 W Grand Ave. Chicago, Ill	EE3-1880
	CHIYODA CHEMICAL INS. & CONS. CO., LTD. 1-20, Doho-Bashi, Minato-Ku, Tokyo, Jap	TOR31
Jap	Chiyoda Chem Eng & Con Co Ltd. 1 Imabashi 4-chome, Higashi-Ku, Osaka (20) 1080	
	CHROMIN CORP. OF AMERICA Box 1229, Waterbury 20, Conn	PLa-7901
Ill	Chromium Corp. of America 4845 W Chicago Ave. Chicago 51	AUT-2716
Ohio	Chromium Corp. of America 3701 Union Ave. Cleveland 5	HU-6019
NJ	Chromium Corp. of America Rahway	FU7-5000
	CITY CHEMICAL CORP. 132 W 22nd St. New York 11, NY	WA5-2732
	CLARK CONTROLLER CO. 1146 E 152 St. Cleveland 10, Ohio	GL1-5000
Ala	The Clark Controller Co. 1707 Rome St. Birmingham 5	TUr-0407
Cal	The Clark Controller Co. 4755 E 49th St. Los Angeles 58	LUd-0000
Cal	The Clark Controller Co. 1770 Yosemite Ave. San Francisco 24	VAl-0540
Ill	The Clark Controller Co. 5107 W Ogden Ave. Brookfield	HOr-9707
Mass	The Clark Controller Co. 109 Kneisley St. Revere 51	BE4-0000
Mich	The Clark Controller Co. 13000 W 7-Mile Rd. Detroit 35	VE3-2725
Mo	The Clark Controller Co. 7 N Brentwood Blvd. St. Louis 5	PA7-7270
NY	The Clark Controller Co. 1300 E Delaware Ave. Buffalo 15	TX3-1404
NY	The Clark Controller Co. 60 E 42nd St. New York 17	MU7-1740
Ohio	The Clark Controller Co. 13000 Cedar Rd. Cleveland 10	HU-0000
Pa	The Clark Controller Co. 130 Conifer Ave. Ardmore	GR7-0797
Pa	The Clark Controller Co. 2003 W Liberty Ave. Pittsburgh 16	LO1-0540
	CLAYTON ENGINEERING CO. Orchard St. Crawley Sussex, Eng	CR2-0230
	CLEVITE TRANSITOR 200 Smith St. Waltham 54, Mass	TRi-7700
Ariz	Pryor 865 N Scottsdale Rd. Scottsdale	WEt-0971
Cal	Clevite Transitor 2462 W Century Blvd. Inglewood	OSb-4137
DC	J. A. Moses & Co. 1440 G & F Sts. NW, Washington	MEt-2700
Fla	J. F. Wattles 7810 Bird Rd. Miami	MOh-5474
Ill	Clevite Transitor 1315 N Hudson Ave. Chicago	TOr-7070
Minn	R. C. Rupp, Inc. 1400 W Idaho Ave. St. Paul	MOr-0007
Mo	W. E. Fry Co. 406 W 34th St. Kansas City 11	JE1-0020
NY	Clevite Transitor 220 Northern Blvd. Great Neck	HU7-0434
NY	Fowler Beach Corp. 2700 East Ave. Rochester	LOr-0440
NC	J. L. Highsmith & Co. 2733 Monroe Rd. Charlotte 5	PA7-0540
Pa	Clevite Transitor 100 Town Ctr. Rd. King of Prussia	MU-0000
Tex	M. F. Kilgore P. O. Box 5113, Houston	JA3-0400
Wash	R. Levinson Co. 1201 E Denny Way, Seattle	LA3-8120
	CLIFTON PRECISION PRODUCTS CO., INC. 1055 Lents Rd. Unused Mail, Pa	HA2-1200
Cal	Designic Engineering Co. 900 W Arbor Vitae St. Inglewood	OSb-0546
Mass	The Dudney Corp. 487 Cherry St. West Newton 65	BR4-2000
Mo	Clifton Precision Prods. Co., Inc. 200 S Brentwood, Clayton 5	PA6-5800
NY	H. W. Beede Co. 600 Glen Cove Rd. Glen Head	OSb-0300
Ohio	Clifton Precision Prod. Co., Inc. 1000 Bakersville Ave. Dayton 21	CLA-0021
Tex	Ammon & Champion 2724 Bonar St. Dallas 4	FLY-8000
Wash	H. R. Smith & Co. 6065 1st Ave. Seattle 8	PA6-3000
Wis	Clifton Precision Prods. Co., Inc. 5005 W Oklahoma Ave. West Allis 14	HU1-1142
Pur	A. S. Boyn, Inc. 50 Broad St. New York, NY	WHi-1400
	CLIMAX MOLYBDENUM CO., DIV. AMER METAL CLIMAX INC. 1270 Ave. of the Americas, New York 20, NY	PLT-4700
Cal	Climax Molybdenum Co. Div. 600 S Grand Ave. Los Angeles 17	
Del	Climax Molybdenum Co. Div. Midland Savings Bldg. Denver 2	
Ill	Climax Molybdenum Co. Div. 230 N Michigan Ave. Chicago 1	
Mich	Climax Molybdenum Co. Div. 404 Fisher Bldg. Detroit 2	
Ohio	Climax Molybdenum Co. Div. 2200 S Dixie Hwy. Dayton 20	
Pa	Climax Molybdenum Co. Div. 1105 Union Trust Bldg. Pittsburgh 19	
	CROMAR & CO. ANHAR, LTD. 24 Victoria St. London SW1, Eng	
	CROMAR CORP. 2214 17th St. Philadelphia 32, Pa	HAS-3144
Ga	Boiler Equipment Service Co. 1070 Alto St. NE, Atlanta 24	HE4-7270
Ill	Cochrane Engineering Co. 600 W Jackson Blvd. Chicago 6	HA7-0220
Ind	Delaware Engineering Co. 116 N Penn. St. Indianapolis 4	MA2-5500
Mass	Cochrane Steam Specialty Co. 65 Hemenway St. Boston 10	HAS-0447
Mich	The F. H. Moore Co. 1016 Ford Bldg. Detroit 26	WO2-9700

TERR	MANUFACTURERS SALES/OR REPRESENTATIVES OFFICES	TEL. NO.
Mo	Lane Machinery Co. 7th & Market Sts. St. Louis 1	CE1-0022
NY	Cochrane Corp. 901 Medical Arc. New York 13	MUS-3535
NY	D. S. Mizell Co. Box 66, Hamilton Sta. Rochester 18	LUn-0060
NC	Brown & Morrison 1000 E 7th St. Charlotte 4	EDi-0774
Pa	Dover Corp. 8th & Liberty Ave. Pittsburgh	EX7-5000
Tenn	Dudney Engineering Co. 3000 Central Ave. NW, Knoxville 17	XM4-0802
	COBB CORP., SOUTHWEST 121 S. Columbia Ave. Mt. Vernon, NY	MO4-2000
Cal	S. Cobb Corp. of Calif. 101 C. H Maple St. Burbank	VIo-0777
	COLE ELECTRIC CO. 3429 Dallas St. Culver City, Cal	UPh-4000
Cal	M. B. Gilbert Co. Box 46004, Los Angeles 46	OSb-3410
Cal	Cadwin & Tipton 3270 Rosecrans, San Diego 10	AC2-0400
Cal	K. M. Hyslin Co. 141 King St. San Francisco 7	YUo-6510
Colo	Aviation Products 817 Quenzie St. Aurora	EMf-1011
Ga	W. V. Gearhart Co. Gearhart Bldg. Atlanta 18	CE2-0431
Kan	Aviation Products 6001 E Kellogg, Wichita	MU4-0220
Mo	L. G. Wendegen 4040 Tower Ave. Kansas City	MU1-1355
NY	D. Berman & Sons Sales Co. 504 E 59th St. Brooklyn 10	ULg-2000
Tex	E. B. Ashcraft Co. Inc. 1300 Fleetman Ave. Dallas 3	WHi-5107
	COLLINS CORP. G.L. 2020 E Hallett St. Long Beach 5, Cal	GEm-2121
	COLUMBIA ELECTRIC MFG. CO. 4219 Hamilton Ave. Cleveland 14, Ohio	EN1-0050
	COLUMBIA NATIONAL CORP. 1 Gateway Center, Pittsburgh, Pa	AT1-5100
	COLUMBIA TECHNICAL CORP. 24-30 Ridge-Dex Exp. V. Rockville 77, NY	YE2-4000
Cal	M. W. Kredel & Co. 136 E Valley Blvd. Alhambra	CUr-7004
DC	Aero Engineering Co. 730 15th St. NW, Washington 5	EX3-0001
Fla	J. Gaerner & Co. 236 Lincoln Rd. Miami Beach	
Ill	Malowec Sales Co. 4006 W North Ave. Chicago 39	ME7-0000
Mass	Pendeng Sales 235 Perkins Ave. Brockton	BU9-0004
Mo	Kay Sales Co. 5800 Grand Ave. Kansas City 3	BA1-0700
NY	Young Associates 907 Monroe Ave. Rochester 20	HR1-2136
NY	A. C. Lieon & Assoc., Inc. 1051 Franklin Ave. Mineola	PI1-1044
NC	G. P. Schiffler & Co. P.O. Box 6005, Greensboro	
Tex	W. Pat Pulliz P.O. Box 12202, Fort Worth	PE9-2304
Utah	Tri-Western Agency 1410 S Main, Salt Lake City 15	HY-2275
Can	Lake Engineering Co., Ltd. 120 Marcelle St. Scarborough, Ontario	PL7-8110
	COMBUSTION ENGINEERING INC. 200 Madison Ave, New York 16, NY	MU5-4000
Ala	Combustion Engineering, Inc. 14 Office Park, Birmingham 19	TRo-0611
Cal	Combustion Engineering, Inc. 615 S Flower St. Los Angeles 17	MAc-5711
Cal	Combustion Engineering, Inc. 155 Sansome St. San Francisco 4	YU2-0202
DC	Combustion Engineering, Inc. 1001 Conn Ave. NW, Wash 6	DU7-1410
Ill	Combustion Engineering, Inc. 135 W Adams St. Chicago 3	RAn-5404
Mass	Combustion Engineering, Inc. 83 Pulaski St. Boston 10	HAS-0600
NC	Combustion Engineering, Inc. 222 S Church St. Charlotte 2	EDi-0141
Ohio	Combustion Engineering, Inc. 55 Public Sq. Cleveland 13	MU1-7470
Ohio	Combustion Engineering, Inc. 617 Vine St. Cincinnati 2	CH3-0700
Pa	Combustion Engineering, Inc. 1 Gateway Center, Pittsburgh 22	AT1-1510
Wash	Combustion Engineering, Inc. Skinner Bldg. Seattle 1	MA4-0220
	COMERCE at Les FABRICATIONS INDUSTRIELLES S.A. 107 Ave de Schaerbeek, Home, Brussels 12, Belg	51.25.11
	COMMISSARIAT a l'ENERGIE ATOMIQUE SERVICE des RADIOELEMENTS B. P. 2, Gif-sur-Yvet S.O. Fr	
	COMPONENTS CORP. NUCLEAR INSTRUMENT DIV. 106 Main St. Denville, NJ	OA7-0290
NY	F. F. Sylvester Associates 640 Morris Ave. Springfield, NJ	DR2-0004
	COMPRESSORS & ENGRANS CORLIN 18 Bd. Saint Marcel, Paris 5, Fr	PO20-19
Md	American Instrument Co. 8000 Georgia Ave. Silver Spring	EU9-1727
Aus	Schwarzenbach 8 Rathaus Platz, Vienna	
Belg	Tacerlab Aeroport d'Anvers, Anvers	RA-20-53
Can	American Instrument Co. 8000 Georgia Ave. Silver Spring	JU9-1727
Eng	(CT) London 27 Ashley Pl. Victoria St. London SW1	SE-21
Holl	J M C V Brouker Power 10, Den Haag	112101
Ital	SIP Piazza Castello 101, Milano	897,042
Jap	Tokkin Sanso Kabushiki Kaisha 12 Takamura-cho, Hyogo-ku, Kobe	
Swit	Kabel Apparatebau Ag Albisrieti, Zurich	
USSR	Air Liquide 75 Quai d'Orsay Paris (7), Fr	46-30
WGer	Galler G.m.b.H. Wiesen Str 24, Dusseldorf	1.00.47
	COMPUTING CORP. 450 S. Warminster Rd. Hatboro, Pa	OS5-4700
Ala	G. Gilliam 1304 Memorial Pkwy S, Huntsville	XD-4234
Cal	Lancombe Engineering Co. 1600 S Arroyo Pkwy, Pasadena	MU2-3068
Cal	Lancombe Engineering Co. 180 N "B" St. San Mateo	DU5-7607
DC	Kelbery Associates 1730 Eye St. NW, Washington 6	FE3-4005
NJ	Automatic Systems, Inc. P.O. Box 480, Camden 9	WA5-8135
NY	J. L. Moore Co. 955 Mill St. Buffalo 21	HF3-0400
NC	E. M. Sturgeon Co. P.O. Box 11000, Charlotte 5	EI 3-5162
Ohio	Scopp Engineering Sales Co. Box 2008, Kettering 29, Dayton	TU5-0000
Utah	Control Systems, Inc. 455 E 4th S. Salt Lake City 11	EM4-0455
	COMPUTER CONTROL CO., INC. 983 Concord St. Framingham, Mass	TR5-4000
Cal	Computer Control Co. Inc. 2211 Barry Ave. Los Angeles 64	GR2-0421
Colo	Kelly Enterprises 806 C 4th St. Loveland	MO7-1270
Ill	Lang, Classen & Associates 9700 N Cicero Ave. Chicago 30	SP4-0810
Md	Computer Control Co. 8200 Fenton St. Silver Spring	OP7-1720
Mich	Dayton Associates 14700 Schoolcraft Ave. Livonia	AV6-2150
Ohio	Dayton Associates 6217 Avery Rd. Cleveland	AD8-0421
Ohio	Dayton Associates Talbert Tower, Dayton 5	BA3-0421
Pa	J. Rodrigues 66 Holly St. Levittown	VO6-0400
Pa	R. E. Sanford Co. 5400 Clairton Blvd. Pittsburgh	TO4-0455
Tex	Ammon & Champion Co. 2724 Bonar St. Dallas	FL3-0001
Aus	A. Thom Ltd. 101 Broadway, Sydney, N.S.W.	
Jap	Kyokuto Boeki Kaisha, Ltd. 400 Marunouchi Bldg. Tokyo	

TERR	MANUFACTURERS SALES/OR REPRESENTATIVES OFFICES	TEL. NO.
	COMPUTER EQUIPMENT CORP. 11412 W Olympic Blvd. LA 64, Cal	GR8-0464
Cal	Business Development Associates 1800 E Franklin Ave. El Segundo	EA3-0000
Ohio	B D P Associates 5000 Huberville Ave. Dayton 21	CL3-0176
Tex	B D P Associates 5215 Mesa Ln. Dallas 24	CH7-7755
	COMPUTER INSTRUMENTS CORP. 92 Madison Ave. Hempstead, NY	IV3-5300
Cal	Components Sales California 4854 Van Nuys Blvd. Sherman Oaks	ST4-4020
Fla	W. E. Wolcott Co. Box 1488, Winter Park	MY-3400
Ill	J. G. Burke, Jr. 1400 N Hudson Ave. Chicago 10	MO-5000
Ind	Annis Leich 6000 Hawthorne Ave. Indianapolis 20	CL1-5000
Kan	Kendall Co. 1707 E 2nd St. Wichita	AM5-3040
Md	Baker Sales Co. 600 Allegheny Ave. Baltimore	VA5-0097
Mich	E. T. Mathews Co. 1327 Wells St. Fort Wayne	EA8017
Mi	T. M. Mills Co. 13 S Tanner St. Haddonfield	HA8-1008
NY	Components Sales Corp. 216 E Hartsdale Ave. Hartsdale	IC5-1030
Ohio	J. W. Murray & Associates, Inc. 2000 Euclid Bldg. Cleveland 11	MO8-1010
Utah	T. B. Van Wagoner Co. 1415 S Main St. Salt Lake City	HU6-7201
Wash	G. M. Gilbert & Associates 4801 7th Ave. S, Seattle 8	MA5-0705
	COMPUTER SYSTEMS INC. Calvert Rd. Hammonds Junction, NJ	BA8-2201
Cal	E. G. Kimmgas 14401 Vanowen Blvd. Sherman Oaks	ST4-5001
Fla	W. S. Barron 1402 Northwest 11th Pl. Gainesville	
Ill	E. H. Cutler 15 S Austin Blvd. Chicago 44	CO5-7202
Tex	C. G. Hurlbrid 119 Maryland Place Mall, Houston 36	MA5-0700
Jap	Mishinon Co. Ltd. Maru-Machi, Mitsubishi, Box 1185, Tokyo	
Mex	M. A. Rubio Avenida Fuente 15, Mexico 6, D.F.	55-10-10
Neth	I.R.C.A. Paradijsst. 22 Voorburg, Holl	
	COMPUTER SERVICE & ENGRG CO. INC. 150 Observer Hwy. Hoboken, NJ	OL3-6420
Ala	D. S. Gooch Associates 2010 1st Ave. N, Birmingham 13	HA0-0101
Cal	Rasco Corp. 700 Brannan St. San Francisco 3	GU1-0021
Conn	Calmar Industrial Associates 55 George St. Bristol	LO2-1107
Iowa	J. E. Johnson 2004 N 48th St. Lincoln 8, Neb	LE-0246
La	Wilson-Toler & Co. 4101 San Jacinto St. Houston 4, Tex	JA3-6469
Mich	J. D. Rupert Co. Box 112, Kalamazoo	FE6-4000
Neb	J. E. Johnson 2004 N 48th St. Lincoln 8	LE-0246
Ohio	M. K. Elsevin, Jr. & Co. 2000 Ingleside Rd. Cleveland 22	WA1-0800
Tex	Wilson-Toler & Co. 4101 San Jacinto St. Houston 4	JA3-6469
PR	H. V. Gooch Co. Box 46, San Juan	
	CONBEAST RUBBER & PLASTIC CO. DIV. U.S. STONEWARE CO. Box 671, Conneaut, Ohio	SW-4146
Ill	G. W. Hoffman 1204 Gilbert Ave. Downers Grove	WO9-4047
Mich	Hammond-Hayes & Co. 1004 N Washington St. Lansing 6	IV3-0811
NJ	L. O'Reilly 53 Dales Pl. Colonia	MU3-0004
NY	J. C. Clark 276 Edgewood Ave. Kenmore 38	TF4-1003
NC	R. Hess 9 E Athens Ave. Ardmore, Pa	MO-0040
Pa	R. O'Reilly 9 E Athens Ave. Ardmore	MO9-1136
	CONOFLOW CORP. 3700 Arch St. Philadelphia 3, Pa	LO5-7540
Cal	J. M. Vocker & Co. 4804 Lankershim Blvd. North Hollywood	TR7-0811
Ill	J. R. Simpson & Co. 3230 S 17th Ave. Maywood	FI5-1813
La	Rubber-Sub Co. 819 Kings Hwy. Shreveport	LU5-0441
Mass	King-Cage Engineering Co. 55 Trowbridge St. Newton Center 58	BA-7000
NY	Conoflow Corp. 750 3rd Ave. New York 17	MU5-0000
NC	Brown & Morrison Box 4007, Charlotte	EDi-0774
Ohio	Myers & Healey, Inc. P. O. Box 30070, Cincinnati 30	DU7-7700
Okla	Tom Co. P. O. Box 7006, Tulsa	LU4-4700
Tenn	Engineered Instrument Sales Co. Box 6947, Memphis 12	FA3-1270
Tex	R. Mack Gable Co. 5722 Sweet Blvd. Houston 5	MO4-1002
Wash	Kenson & Leeland Instrument Co. 2127 2nd Ave. Seattle 1	MA3-7000
	CONSOLIDATED CONTROLS CORP. 14 Grand Ave. Bethel, Conn	PO-4271
Cal	Consolidated Controls Corp. 700 S Isis Ave. Inglewood	OR1-7080
Cal	Bellows Co. 420 Market St. San Francisco	YU2-0710
DC	Consolidated Controls Corp. 1000 Connecticut Ave. Washington	ME7-6015
Ill	Lightner Associates 6202 N Milwaukee Ave. Chicago	SP4-1500
Ind	Anthony Engineering Sales 600 N Washington St. Sparta, Ill	2770
NM	Aztec Enterprises 505 San Pedro, NE, Albuquerque	AM8-0401
Pa	Argo Industries, Inc. P. O. Box 68, Wanamaker	OS6-4131
Pa	Lowry-Dietrich Co. 700 Clairton Blvd. Pittsburgh 16	WA1-0900
Can	Aeromotive Eng. Products, Ltd. 147 Hymus Blvd. Pte. Claire, Montreal	OX7-0610
	CONSOLIDATED CONTROLS CORP. 2027 San Mateo Blvd. NE, Albuquerque, NM	AM8-2071
Cal	Bellows Co. 420 Market St. San Francisco	YU2-0710
Cal	King Engineering Co. 6201-1/2 Hollywood Blvd. Los Angeles 27	HO4-7188
Colo	Dunn Harvester 10000 Carrol Ln. Denver 22	SH4-1003
Conn	Northeast Engineering, Inc. 2610 Dixwell Ave. Hamden	CH4-4401
Kan	American Air Service Box 3002, Wichita	AM7-3000
Ky	L. Dietrich Co. 800 W 1st St. Dayton 2, Ohio	BA3-0402
Mo	Anthony Engineering Sales 600 N Washington, Sparta, Ill	2770
NJ	Argo Industries, Inc. P. O. Box 68, Wanamaker, Pa	OS6-4131
NY	Components for Industry 58 Bedgemont Ct. Buffalo	HF3-0900
Ohio	L. Dietrich Co. 800 Marion Bldg. Cleveland 15	OU1-1805
Pa	L. Dietrich Co. 700 Clairton Blvd. Pittsburgh 16	TU1-0900
Tex	Aeroland Air Service Box 12185, Dallas	FL3-0420
	CONSOLIDATED DIESEL ELECTRIC CORP. 600 Canal St. Stamford Conn	DA3-2201
	CONSOLIDATED ELECTRODYNAMICS CORP. 360 Sierra Madre Villa, Pasadena, Cal	MU5-8221
Cal	Consol. Electrodynamics Corp. 1060 E Green St. Pasadena	YU5-4371
Cal	Consol. Electrodynamics Corp. 4015 Pelican Way, Palo Alto	DA6-0960
Ill	Consol. Electrodynamics Corp. 5540 W Peterson Ave. Chicago 45	RO5-4000
Mass	Consol. Electrodynamics Corp. 51 St. James Ave. Boston 16	HAS-1304
Mi	Consol. Electrodynamics Corp. Box 980, Los Alamos	LO9-4215
NM	Consol. Electrodynamics Corp. 505 San Pedro Blvd. NE, Albuquerque	AL6-0071
NY	Consol. Electrodynamics Corp. 750 North Ave. Springfield, NJ	DR6-4000
Ohio	Consol. Electrodynamics Corp. 3770 N High St. Columbus	AM7-7400
Pa	Consol. Electrodynamics Corp. 101 N 33rd St. Philadelphia 4	EV5-1000
Tex	Consol. Electrodynamics Corp. 7000 Carpenter Freeway, Dallas	FL3-0001

Tex Consol. Electrodynamics Corp. 6465 Grigg Rd. Houston CLA-5900
Va Consol. Electrodynamics Corp. 1515 N Court House Rd. Arlington 1 ..... JA5-1442

CONSOLIDATED PNEUMATIC TOOL CO.
222 Queen Rd. London SW, Eng FUL7722

Aus Consol Pneumatic Tool Co. Ltd. 70-80 Clarke St. N Coburg N 14, Melbourne FL8801
Belg Chicago Pneumatic Tool Co. S.A. 48, Rue du Moulin, Brussels 1 ..... 11.08.00
Fr Ste Auxiliaire Chicago Pneumatic 66 Rue de Plaisir, Paris 15e MON9-15
Ger Pneumg G.m.b.H. Schlierbach 3, Colombiastr. RU8944
Holl Zuwesbaarsa & Co. N.V. 52, Kanaal, Rotterdam RO80250
Ind Consol Pneumatic Tool Co. Ltd. 201, Agra Rd. Meland, Bombay, 18 84-1274
S Af Consol Pneu Tool Co. S.A. (Pty.) Ltd. 1-5, Regent St. Selby, Johannesburg 34-2351

CONSOLIDATED REACTIVE METALS INC. 115 Hoyt St. Mamaroneck, NY OW8-2300

Cal M. W. Riedel Co. 150 E Valley Blvd, Alhambra CUY-7204
Mass J. M. Lamonner Co. 66 Concord St. Framingham TRO-6600

CONSOLIDATED VACUUM CORP. 1775 Mt. Read Blvd. Rochester, NY GL3-2300

Cal Consolidated Vacuum Corp. 4945 Felton Way, Palo Alto DA1-0161
Cal Consolidated Vacuum Corp. 4940 Van Nuys Blvd, Sherman Oaks STP-7300
Ga Consolidated Vacuum Corp. 2072 Peachtree Rd. NE, Atlanta 5 ..... CEN-1171
Ill Consolidated Vacuum Corp. 1040 W Potomac Ave. Chicago 40 ..... MOl-1207
Mass Consolidated Vacuum Corp. 31 St. James Ave. Boston 16 ..... HUB-0772
NJ Consolidated Vacuum Corp. 120 Morris Ave, Springfield DR8-4800
NJ Consolidated Vacuum Corp. 9 Tanner St. Haddonfield HAD-4000
NM Consolidated Vacuum Corp. 201 Washington SE, Albuquerque AMH-0033
Ohio Consolidated Vacuum Corp. 2770 N High St. Columbus 24 ..... AMT-7004
Va Consolidated Vacuum Corp. 1000 16th St. N, Arlington 1 ..... JA5-1441
Can Bell & Howell Canada, Ltd. 68 Industry St. Toronto 15, Ont. HO7-0131

CONSOLIDATED WESTERN STEEL DIV.
U.S. STEEL CORP. Box 3013, Term Ann, LA 54, Cal BA3-7711

Ariz CWSD 310 S Star Ave, Phoenix AL8-1307
Cal CWSD 2401 California Ave, Fresno AM4-4141
Cal CWSD 1315-30th St. Bakersfield FA3-7080
Cal CWSD 159 Montgomery St. San Francisco DU1-3540
Utah CWSD Box 96, Salt Lake City DA3-0481
Wash CWSD 1720-80 Exchange Bldg. Seattle MA3-0800

CONSULTANTS BUREAU ENTERPRISES, INC.
227 W. 17th St. New York 11, NY AL3-0573

CONTINENTAL CONNECTOR CORP. 34-42 56th St. Woodside 77, NY TW4-6421

Ariz F. Schneider Associates 1052 S Wilshire Dr. Tucson AZ3-6173
Cal Delar-Amco Corp. 11600 W Olympic Blvd, Los Angeles BR2-0981
Ill Delar-Amco Corp. 400 N Michigan Ave, Chicago WH4-4000
Mich Bacon-Cowan & Co. 22120 Grand River Ave, Detroit KE3-7700
Mo Engineering Services Co. 6727 Vernon Ave. St. Louis 30 ..... PA8-0303
NY Delar-Amco Corp. 45-01 Northern Blvd. Long Island City RA1-4900
NY Midtown Research Sales 207 Wellesley Rd. Syracuse ....
NC S. Henry Associates Box 6018, Charlotte FR6-0800
Ohio F. E. Kelner Sales Co. 4300 Prosperity Pl. Cincinnati 38 ..... CR5-0011
Pa S. Auerbach P.O. Box 208, Levittown ....
Tex The Jackson Co. P.O. Box 9708, Dallas 14 ..... FL1-0302
Wash R. H. Conley & Associates 101 Jones Bldg. Seattle MU3-4207

CONTINENTAL DIAMOND FIBRE CORP. Newark, Del BW8-2231

Cal C-D-F Corp. 2800 E 11th St. Los Angeles 23 ..... AN8-1971
Colo C-D-F Corp. 100 Denver Club Bldg. Denver 2 ..... AC2-0200
Ill C-D-F Corp. 1515 N Harlem Ave. Oak Park EU5-6270
Ind C-D-F Corp. 700 E 38th St. Indianapolis 5 ..... WA5-0601
Mass C-D-F Corp. 1245 Hancock St. Quincy 69 ..... GR8-0100
Mich C-D-F Corp. 101 Offtomer Bldg. Detroit 26 ..... BE3-0647
NY C-D-F Corp. 51 E 42nd St. New York 17 ..... OX7-0827
Ohio C-D-F Corp. 1031 Superior Bldg. Cleveland 14 ..... CE1-0200
Pa C-D-F Corp. Bridgeport BR-4000
SC C-D-F Corp. Box 591, Spartanburg SU5-1200
Tex C-D-F Corp. 1202 S Good-Latimer Expwy. Dallas 15 ..... EA8-1202
Wis C-D-F Corp. 6109 W Lincoln Ave. Milwaukee 19 ..... LI1-7080

CONTINENTAL SIGNAL, INC. 1000 N Raby St. Melrose Park, Ill MU1-7700

Ariz Sungle Engineering Co. P.O. Box 9405, Phoenix 30 ..... WH7-1123
Cal Milfoss Engineering, Co. 16000 Cantlay St. Van Nuys TR5-0800
Cal H. Rosbaum 666 Jefferson Ave. Redwood City EM6-7101
Fla Gulf Instrument Assoc. 100 Avenue A, SE, Winter Haven CY3-1060
Idaho A. H. Smith 111 North Hayes, Pocatello CE3-4816
Mass Andrus-Peaks Co. Box 384, Hadick CL3-3200
Mich Elliott-Sales Co. 3030 E Maple St. Birmingham MI4-4000
Ohio Elliott-Sales Co. 10473 Concord Dr. Cleveland 16 ..... EU5-0011
Pa A. F. Thisler 600 Constitutional Dr. Warminster MB-7000
Tex SECE & Associates, Inc. 108 Pentwood Ave. Houston 11 ..... WA6-0027
Va A. E. Kreger, Jr. Box 1971, Roanoke DE3-3304
Wash M. J. Pugh Box 98, Bellevue GL4-3040

CONTROL DATA CORP. 501 Park Ave. Minneapolis 15, Minn FE9-0471

Ala Consol Data Corp. 10 Office Park Circle, Birmingham 16 ..... TR5-0401
Cal Consol Data Corp. 3000 Hillview Ave. Palo Alto DA1-0803
Cal Consol Data Corp. 6800 Wilshire Blvd. Beverly Hills CL8-4000
Colo Consol Data Corp. 600 Broadway Bldg. Denver AC3-0501
DC Consol Data Corp. 4400 Wisconsin Ave. Washington 16 ..... EM5-5004
Ill Consol Data Corp. 900 S Oak Park Ave. Oak Park EU8-1917
Mass Consol Data Corp. Draper St. Box 215, Stoneham WF3-0800
Minn Cedar Engineering Div. 1201 Computer Ave. Minneapolis 54 ..... GF5-0411
Minn Consol Corp (Sold) 710 Central Ave. NE, Minneapolis FE6-7000
Minn Consol Data Corp. Research Div. 2710 W 36th St. Minneapolis 16 ..... WE8-1201
NJ Consol Data Corp. Terminal Bldg. Newark Airport, Newark MU5-0440
Tex Consol Data Corp. 4001 Richmond Ave. Houston 27 ..... MA6-5400

CONTROL PRODUCTS, INC. 280 Ridgedale Ave. E Hanover, NJ TU7-0800

Cal Milfoss Engineering Co. 107 S Vermont, Los Angeles 4 ..... DU7-1307
Conn F. Knowlar 2 Modern Rd. W Hartford AD2-7000
Ill S. Canning & Assoc. 6600 W Belmont Ave. Chicago 34 ..... MI7-8770
Mich J. L. Montgomery Co. 3108 Woodward Ave. Birmingham MI5-0804

Minn J. E. M. Anderson Co. 6221 Humboldt Ave. S, Minneapolis TA5-6440
NJ S. S. Hirsch 270 N Mountain Ave. Upper Montclair PI6-0036
Ohio S. F. Hardy 1031 Hulman Bldg, Dayton 2 ..... BA5-1205
Pa Hardy Electronics Sales Co. 200 E Kings Hwy, Haddonfield, NJ HA9-0800
Tex Thomas Engineering Service 2020 Oakland Ave. Dallas 10 ..... LA6-0741
Wash D. Smith Sales Co. 2020 N 45th St. Seattle MU3-0100
Can Automotive Engr. Prod. Ltd. 147 Hymus Blvd. Pte. Claire, Que OXT-0310
Can Automotive Engr. Prod. Ltd. 1012 Avenue Rd. Toronto 12 ..... HU6-0300

CONTROLLED ATMOSPHERE ENCLOSURES MFG. CO. Lemon Air Base, Bartow, Fla. BR2-4001

Cal C. W. Ford Co. 6000 S Hoover, Los Angeles 44 ..... PL3-5221

CONTROLS FOR RADIATION INC. 130 Needle Road Pkwy, Cambridge 40, Mass UNA-5250

Cal Controls For Radiation Inc. 1215 W Redondo Beach Blvd, Gardena FA1-4400
Cal Controls For Radiation Inc. 1400 Bayshore Blvd, San Francisco DU4-0515
DC Controls For Radiation Inc. 1455 Fairmont Ave, Bethesda 14 ..... OL6-1200
Co Controls For Radiation Inc. 3227 Maple St. NE, Atlanta 5 ..... CE3-0256
Ill Controls For Radiation Inc. 840 N Lake Shore Dr. Chicago 11 ..... MI3-0766
Mass Controls For Radiation Inc. 38 University Rd. Cambridge 38 ..... UNA-5250
Mich Controls For Radiation Inc. 30239 Mission, Livonia GA1-7160
NY Controls For Radiation Inc. 811 W Merrick Rd, Valley Stream CU5-8400
Ohio Controls For Radiation Inc. 2700 Hardgrove Rd. Westlake TR1-8711
Pa Controls For Radiation Inc. 412 Johnson St. Jenkintown WA7-4070
Tex Controls For Radiation Inc. 6006 Yale Blvd, Dallas 6 ..... EM1-0401
Can Controls For Radiation Inc. 405 Gilmour, Ottawa, Ontario CE3-0210

COOK ELECTRIC CO. COOK TECHNOLOGICAL CENTER 6401 W Oakton St. Morton Grove, Ill MU7-4600

Ala L. W. Horvath 3206 Hutchens Ave. Huntsville SU4-0411
Cal J. A. Moore 8170 Beverly Blvd. Los Angeles 48 ..... OL3-4040
Conn J. A. Millmoor 6 Barley Pl. Cromwell, NY AM1-0400
DC J. I. Ryan 1511 "K" St. NW, Washington DE7-4700
Fla L. W. Horvath 3206 Hutchens Ave. Huntsville, Ala SU4-0411
Md J. I. Ryan 1511 "K" St. NW, Washington DE7-4700
Mass J. M. Tichner 19 Pinewood Dr. Sanscville TR5-1611
NJ J. A. Millmoor 6 Barley Pl. Cromwell, NY AM1-0400
NY J. A. Millmoor 6 Barley Pl. Cromwell AM1-0400
Ohio A. G. Liefke 1401 Stanley Ave, Dayton BA5-5197
Pa J. A. Millmoor 6 Barley Pl. Cromwell, NY AM1-0400

COOPER-BESSEMER CORP. Mount Vernon, Ohio EX3-6121

Cal Cooper-Bessemer Corp. 1949 Lawrence Ave. Los Angeles 15 ..... RD-7241
DC Cooper-Bessemer Corp. 1011 K St. NW, Washington 6 ..... MA5-0210
Ill Cooper-Bessemer Corp. 121 S Michigan Ave. Chicago 3 ..... WE7-3505
NY Cooper-Bessemer Corp. 640 5th Ave. New York 36 ..... JU6-2730
Tex Cooper-Bessemer Corp. 1310 Fidelity Union Life Bldg. Dallas RT-2005

COOPER METALLURGICAL ASSOC. Box 1499, Cleveland 30, Ohio SW1-0500

COOPER-TIGHT BLUEPRINT & MICROFILM CORP. 2209 Wilson Blvd. Arlington, Va JA5-1900

COPES-VULCAN DIV. BLAW-KNOX CO. 123 W 26 St. Erie 6, Pa GL4-3401

Cal P. E. Welch & Associates 16 New Montgomery St. San Francisco 5 ..... YU5-0040
Cal G. Hallen Sales Co. 3000 Cherry Ave. Long Beach 6 ..... HE4-0231
DC Mahoney Engineering Co. 808 Mills Bldg, Washington 6 ..... DE7-6230
Fla P. Finnegan, Inc. 3703 Grande St. Tampa 9 64-1131
Ill Cordinne Div., Conn Co. 300 W Jackson Blvd, Chicago HA7-0130
Mass Cordinne Steam Specialty Co. 55 Rantoul St. Boston NAF-6667
NY The Kinnick Co. 144 E 44th St. New York 17 ..... MU7-3459
NY H. A. Schlinder 221 Robinson Rd. Syracuse 7 ..... GR6-0752
Pa Hess-Harris Co. 3404 Forbes St. Pittsburgh 13 ..... MU3-3004
Pa The Kinnick Co. 1906 Packard Bldg, Philadelphia 2 ..... RI8-4427
Tenn Dickey Engineering Co. 3000 Central Ave. NW, Knoxville 17 6-0941
Utah C. H. Spencer & Co. 210 W 3300 S, Salt Lake City 10 ..... DE6-0800

COPPEE, EVENCE (ECIC) 100 BD DE Waterloo, Brussels, Belg 380000

CORLEY CO., INC. 405 Hyde Ave. Scotch, NJ PE4-7750

Cal DACO Equipment Co. 3025 College Ave, Oakland OL5-0273
Cal Western Pump Sales Co. 4021 Gleim St, Los Angeles AD3-1135
Fla Dre-Kill Co., Inc. 122 E Morse Blvd, Winter Park MI7-5002
La R. Moss Co. P.O. Box 1185, Baton Rouge WA4-8916
Md Machinery & Equip. Sales Co. 1013 Cathedral St. Baltimore LE9-1811
Mass A. I. Berry 7 McKinnon Ave. Milton OX6-7345
Mo A. Bonner & Assoc. 610 Paul Brown Bldg, St. Louis CE7-5400
NJ Pascoe Equip. Engineering 600 Valley Rd, Wanchung, Plainfield PL5-7717
Ohio Tolco, Inc. 4600 Superior Ave. Cleveland 3 ..... EU1-8500
Pa The Sellers Co. 300 E Church Rd. King of Prussia HA6-7055
Tex R. B. Stockdale Assoc. P.O. Box 98, Houston CA5-1139
Va John & Co. 1 N 5th St, Richmond MA9-1100

CORNELL-DUBILIER ELECTRONICS DIV. FED. PAC. ELEC. CO. 50 Paris St. Newark 1, NJ HA4-7700

Cal Cornell-Dubilier 4346 Glencoe Ave. Venice UP0-0001
Ill Cornell-Dubilier 1807 W Diversey Ave. Chicago BU7-0040
Ind Cornell-Dubilier 1005 Columbia Ave. Indianapolis WA6-5449
Mass Cornell-Dubilier 1900 Sidney Pierce Blvd, New Bedford ....
Mass Cornell-Dubilier 921 Providence Hwy, Norwood HO7-6300
NY Cornell-Dubilier 847 North Ave. E Syracuse HO8-0527
NC Cornell-Dubilier 2002 Dalrymple St. Sanford SP4-7511
NC Cornell-Dubilier 110 E Jones St. Pagoty Springs PO400
Ohio Cornell-Dubilier 1801 Wendell Ave. Lima LD-4270
Ohio Cornell-Dubilier 5001 Far Hills Ave. Dayton 29 ..... AD2-7304
Pa Cornell-Dubilier Box 1001, York TO3-0006

CORNING GLASS WORKS, SHIELDING RADIATION Corning, NY RO3-8911

Cal Corning Glass Works 1056 Market St. San Francisco 3 ..... MA1-8921
Cal Corning Glass Works 420 S Euclid Ave. Anaheim PO3-5400
Ill Corning Glass Works 1470 Merchandise Mart, Chicago 54 ..... DE7-0800
NY Corning Glass Works 717 5th Ave. New York 22 ..... PL5-1300

Pa Corning Glass Works 4 Gateway Center, Pittsburgh 22 ..... GR1-5000
Tex Corning Glass Works Box 12446, Houston 27 ..... MO8-0004

CORRESITE CORP. 44 5 6th St. Brooklyn 11, NY ....

COSMIC RADIATION LABS., INC. 1645 Hancock Hwy. Bellport, NY AT6-0004

Cal Nuclear Industries 1400 Bayshore Blvd. San Francisco 94 ..... DE3-0970
Cal Nuclear Industries 1050-C Duncan Pl. Manhattan Beach FR6-0745
Ga Nuclear Industries 1350 Maple Dr. NE, Atlanta 5 ..... CR5-1205
Ill Nuclear Industries 6744 N California Ave. Chicago 45 ..... RR5-0400
Md Nuclear Industries 9400 Penna Ml. Bethesda 14 ..... CL0-0841
Mass Nuclear Industries 7 Depot Square, Lexington VO3-3320
NY Nuclear Industries 600 Merrick Rd, Lynbrook LA6-5400
NY Nuclear Industries 14 Holland Ct. Valley Stream CU5-7160
Pa Nuclear Industries 801 Huntington Pike, Philadelphia 11 ..... RA5-5000
Tex Nuclear Industries 4006 Yale Blvd, Dallas 6 ..... EM6-0040
Wash Nuclear Industries Box 6107, Seattle 60 ..... CE6-1141

COSMIC TECHNOLOGICAL CORP.
1600 Connecticut Ave. Washington 6, DC

COSSOR INSTRUMENTS LTD. Highbury Gr. London N5, Eng CAN1234

Aus Jacoby, Mitchell & Co. Pty. Ltd. 460 Kent St. Sydney, New S Wales
Belg Tinendale, S. A. Antwerp Apt. Antwerp, 1
Can E.M.I.-Cossor Electronics Ltd. P.O. Box 963, Dartmouth, Nova Scotia
Fr Leland Radio Import Co. 6 Rue Medrod, Paris, 8
Ital Algamene Radio Radio Inst N.V. Wilhelmina 36, Rotterdam
Ital Ing. S. & Dr. Guido Belotti Piazza Tocco 4, Milan
NZ R. S. Rosenthan 136 Victoria St. Christchurch
Nor A. P. Ottesen, A/S Kant Johsgt 3, Oslo
S Af A. T. Williams (Pty) Ltd. Amsdorff & De Beer St. Bezuidenhout
Spain P.A.C.I.S.A. Gral P. Rivas 85, Madrid
Swed M. Swedach AB Sjoomsgatan 19?, Stockholm-Bromma, 3
Swit Vibro-Meter Corp. Mensur, Fribourg

COUCH ORDNANCE INC. 3 Arlington St. North Quincy 71, Mass CY6-0147

Ala R. Attaway Co. 2213 Bob Wallace Ave. SW, Huntsville SE4-2201
Ariz G. Young & Co. 1400 N 32nd St. Phoenix BR6-7205
Cal G. Young & Co. 3775 S Broadway, Los Angeles AD1-4027
Conn Connecticut Valley Enterprises Box 108, Essex EU7-1120
Fla R. Attaway Co. 711 Magnolia Ave. Orlando GA6-0000
Ill L. E. Sellenberg & Associates 6036 W Higgins Ave. Chicago 31 ..... RO8-1044
Minn Hamilton & Kayle Assoc. Inc. 3540 Republic Ave. Minneapolis WE9-7081
Mo Pem Sales Co. 13001 Chambles Ln. St. Louis 41 ..... HE3-4446
Ohio E. S. Penn & Assoc. 1005 Lee Rd, Cleveland Hts. EE1-6404
Pa Technicraft 6222 Ridge Ave. Philadelphia IV2-5223
Tex Thomas Engineering Service 2020 Oak Lawn, Dallas 19 ..... LA6-0741
Wash G. Young & Co. 1020 1st Ave. S Seattle MA3-0123

COX & COMPANY, INC. 115 E 23 St. New York 10, NY OR4-0727

Cal Jackson Edwards Co. 4301 Lankershim Blvd. N Hollywood TF7-1000
Colo Bennett & Associates 105 Valley St. Denver 23 ..... MA5-0913
Kan Associated Industries 405 S Washington, Wichita 2 ..... HD4-0021
NJ A. A. Foley Associates P. O. Box 155, Moonstown HC8-4545
NJ L. C. Sanford 203 Woodland Ave. Rutherford WE9-0070
NY R. W. Ayer Cold Spring Harbor, Long Island MT3-0275
NY Lessel Co. 126 Burnet Ave. Syracuse GR9-9101
Wash Associated Industries 1700 Rainier Ave. Seattle 44 ..... EA3-4401

CRANE CO. Ind. Prods. Co. 4300 S Kedzie Ave. Chicago 32, Ill LA3-2900

Cal C. A. Lathrop 3116 E 37th St. Los Angeles 54 ..... LU9-0045
Ga R. E. Smith, Jr. 1272 Peachtree St. NE, Atlanta 9 ..... TR2-0711
Ill W. A. Robins 4300 S Kedzie Ave. Chicago LA3-2900
NY G. Gunn 500 Park Ave. New York 22 ..... PL3-0600
Tex R. G. Hunter 612 S Akard St. Dallas 2 ..... RU-1971

CRANE PACKING CO. 6400 Oakton St. Morton Grove, Ill YO6-4400

Cal Crane Packing Co. 11005 Sherman Way, N Hollywood PO6-0400
Fla J. Kjellerson 304 S Orion, Clearwater
Ind Crane Packing Co. 8400 Meridian St. Indianapolis 8 ..... WA6-5000
Mich Crane Packing Co. 16200 Mayen Rd. Detroit 35 ..... UR6-8500
Mo J. S. Miller 800 Hanson Ln. Rock Hill WO3-1004
NJ Crane Packing Co. 105 S Newman St. Hackensack HU7-0212
NY Crane Packing Co. 1007 Elmwood Ave. Buffalo 7 ..... TR6-5900
Ohio Crane Packing Co. 1700 Sexton Rd. Cincinnati 37 ..... EL 1-0400
Pa Crane Packing Co. 8 S Montgomery Ave. Ardmore-Cynwyd MO4-1000
Pa Crane Packing Co. 4036 Brownsville Rd. Pittsburgh 27 ..... TU4-0121
Tenn D. O. Miller 800 Mineshaft, Memphis 17 ..... MU9-4040
Tex Crane Packing Co. 6800 Supply Row, Houston 11 ..... WA5-7000

CRAWFORD FITTING CO. 884 E 140 St. Cleveland 10, Ohio LU1-0533

Ala Franklin Valve & Fitting Co. 140 Stanford Ml. Birmingham 9 ..... TR5-1770
Cal W. D. Wilson Co. 1315 Minden St. S Pasadena MU9-0027
Fla Gasonia Valve & Fitting Co. 2130 W Broward, Ft. Lauderdale LO1-2777
Ill Hinsdale Valve & Fitting Co. 6600 S Pulaski, Chicago 29 ..... LU1-0232
La Capital Valve & Fitting Co. 5400 Wyandotte, Baton Rouge EL6-0000
Mass Cambridge Valve & Fitting, Inc. P. O. Box 5, Framingham TR6-0001
NY R. S. Cann & Co. 1107 Globe Ave, Mountainside AD8-4444
Ohio Albert Valve & Fitting Co. 1015 E 55th St. Cleveland 14 ..... MA1-7215
Okla B. McKelly Co. Inc. 8700 E Admiral Blvd. Tulsa TE5-1502
Pa Fogleman Co. Inc. 2000 Willow Ave. Pittsburg 34 ..... LU1-8540
Tex T. A. Reed & Co. P. O. Box 6001, Houston 6 ..... JA6-4000
Wash Automotive Products N 130 Division St. Spokane 2 ..... RU1-1150

CRAWFORD FITTING (Canada) LTD.
[illegible] Kent Ave. Niagara Falls, Ont EL6-2205

Can Ch-Can Chemical & Ind Sales, Ltd. 7225A 104 St. Edmonton, AB GE9-4008
Can Lamontine Valve & Fittings, Ltd. 4060 Mackenzie St. Montreal 30, Que HU1-4007
Can Niagara Valve & Fittings Ltd. ... 102 Parkdale Ave. N, Hamilton, Ontario LE6-6664
Can Horne Valve & Fitting Ltd. Box 266, Sarnia, Ontario EM6-3420
Can Lamontine Valve & Fittings Ltd. 3420 Sidney Ave. Ottawa, Ontario TA5-1040
Can Tank Valve & Fitting Ltd. 76 Sandriver Dr. Concord, Ontario AY6-3441

CHILL-ETCHER ENGINEERING CO.
1522 Main St. Stamford, Conn 964-7722

Cal Arbon Engineering Co. ..... 6609 Melrose Ave. Hollywood 38
Cal B-W Engineering Co. ..... 3007 Cypress St. Oakland 7
Del Industrial Products, Inc. ..... Grosspoint Dr. Timonium, Md
Ga Whitmoie Equipt Co. ..... P.O. Box 11003, Atlanta 8
Idd H. A. McCormick ..... Phoenix Post Office, Dallas County
Mass H. W. Pellar Co. ..... 89 Freeblight St. Stoneham Center 80
NY Baker Products, Inc. ..... 386 Fort Lee Rd. Leonia, NJ BA7-6400
Pa S. Caspar Sweney ..... P.O. Box 272, Carlisle
Pa G. Kahn Co. ..... P.O. Box 24, Upper Darby
Can Meadows Corp. Ltd. ..... 68107 Dundonk Ave. Toronto, Ont
Can Meadows Corp. Ltd. ..... 4600 St. Catherine St. W. Montreal
Jap Japan Organa, Ltd. ..... Tokyo

CONSOLIDATED ELECTRONICS CORP. 84 Kinkel St. Hawthorne, NY 890-3027

Cal Amtrol Inc. ..... 940 1st St. Los Alios WH3-0600
Cal Fishline ..... Box 1015, Tustin LI6-0015
Mass E. F. MacDowell Co. Inc. ..... Box 102, Melrose 76 ..... MO5-0600
NJ G. P. Lentfer ..... Box 88, Hurley 16 ..... HO7-0000
Wash J. K. Dooley Co. ..... 2215 Western Ave. Seattle 1 ..... AT6-0033

CROSBY VALVE & GAGE CO. (ASHTON VALVE)
4403 Roebuck St. Houston, Tex EV4-3121

Cal Crosby Valve & Gage Co. Inc. ..... 5045 Hilton St. Los Angeles AM9-6150
Cal Trident Engineering Co. ..... 16 Doale St. San Francisco YU8-0333
Colo Scott Equipment Co. ..... 4001 Jackson St. Denver DE3-4309
Ga W. E. Stallings Co. ..... 3139 Maple Dr. NE, Atlanta CE7-0600
Ill Crosby Valve & Gage Co. ..... 220 S State St. Chicago HA7-7000
Mich H. A. Reed Co. ..... 19405 James Couzens Hwy. Detroit VE9-0600
Mo Economy Equipment Co. ..... 4030 Olive St. St. Louis FO7-5300
NY Crosby Valve & Gage Co. ..... 370 Lexington Ave. New York MU6-0642
Pa Iron Equipment Corp. ..... 134 Forest Ave. Narberth TR7-0606
Tex W. H. Cattie & Co. ..... 4230 Jefferson Ave. Houston WA3-1081
Tex Crosby Valve & Gage Co. ..... 1211 Dragon St. Dallas 7 ..... RI1-0771
Wash Tom Industrial Sales Co. ..... 1600 14th Ave. NW. Seattle EU9-1361

CROSS CO., H. ..... 3229 Boquetine Ave. Union City, NJ UN3-1754

CROSSBOARD MARINE DISPOSAL CORP.
111 Belvedere St. Revere 52, Mass LA3-3012

CRUCIBLE STEEL CO. OF AMERICA
Box 88, Pittsburgh 30, Pa CA7-7000

Cal K. M. Avem ..... 2060 Bryant St. San Francisco 10 ..... AT3-0611
Colo Crucible Steel ..... 4001 Denver St. Denver 16 ..... AT0-0885
Ga A. B. Wells ..... 3400 Malone Dr. Chamblee GL7-0841
Ill D. B. Water ..... 4001-4011 W Cortland St. Chicago 39 ..... SP2-0000
Ind Crucible Steel ..... 105 S Kopmann Ave. Indianapolis 7 ..... MB3-4001
Mass B. Rosen ..... Waltham Industrial Center, Waltham TW4-0190
Mich W. Jenks ..... 4000 E Nevada Ave. Detroit 26 ..... FO8-4400
Mo C. A. Cardarelli ..... 3010 Page Blvd. St. Louis 34 ..... RA3-4400
NY Crucible Steel ..... Box 666, Mineola PI1-0550
Ohio P. H. Thebe ..... 21400 Aurora Rd. Cleveland 39 ..... CH9-0400
Pa R. J. Beal ..... Box 4514, Pittsburgh 6 ..... WA3-3000
Tex Crucible Steel ..... 7001 Sovereign Row, Dallas 35 ..... FL7-0041

CRYOGENIC ENG. CO. ..... 280 W 49 St. Denver 16, Colo CH4-8097

Cal Cryogenic Engineering Co. ..... 6801 S Bellanca, Los Angeles 45 ..... OR6-1170
Fla COL-INS-CO., Inc. ..... 6700 Precision Dr. Orlando CH1-1501

CRYSTAL RESEARCH LABS. INC.
29 Alfyn St. Hartford, Conn JA7-3215

CRYSTALONICS INC. ..... 340 5th St. Cambridge 42, Mass TR4-7084

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Cal Aerol Associates ..... 1177 University Dr. Menlo Park BA1-1054
Colo Aerol Associates ..... Denver Club Bldg. Denver TA5-2046
Fla Aerol Associates ..... 680 Orange Ave. Winter Park MI4-0811
Ill Aerol Associates ..... 1565 Washington Bl. Glenview PA9-1600
Idd Aerol Associates ..... 6000 York Rd. Baltimore DE7-0110
Mass Hathaway Discounts ..... 500 Main St. Cambridge KI7-0000
Minn Aerol Associates ..... 3404 E Lake St. Minneapolis PA4-1046
NJ Aerol Associates ..... 307 S Harrison, E Orange OR6-4000
NY Aerol Associates ..... 170 Great Neck Rd. Great Neck HU7-0020
NY Aerol Associates ..... 108 Pickwick Rd. Dewitt GR-4400
Wash Aerol Associates ..... 400 1st Ave. W. Seattle AT9-0000

CRYSTALS S. A. ..... Case Concrete 156, Geneva 2, Switz

CUMMINS & BARNARD, INC. ..... 2900 S State, San Arbor, Mich HU2-5420

Cal Moreno & Riley ..... Wilmington
Fla Cumrodes & Samuel, Inc. ..... Jefferson Bldg. Pensacola

CUNO ENGINEERING CORP. ..... 55 S Vine St. Meriden, Conn BE7-5241

Cal Cuno Engineering Corp. ..... 470 Huntington Dr. San Marino MU7-0000
Cal Cuno Engineering Corp. ..... 710 California St. Burlingame BU-0207
Ill Cuno Engineering Corp. ..... 4400 N Sheridan Rd. Chicago LO1-7000
Ind J. S. Carlson Co. ..... 5704 Washington Blvd. Indianapolis 20 ..... CL3-5070
Mich J. H. Fraver Co. Inc. ..... 40 W Hancock Ave. Detroit 1 ..... TE2-4130
NY Cuno Engineering Corp. ..... 4040 Main St. Buffalo 26 ..... CE4000
NY King & Shepherd, Inc. ..... 59 Church St. New York 7 ..... CO7-1400
NC Cuno Engineering Corp. ..... 307 Miller St. SW. Winston-Salem PA5-0700
Ohio Cuno Engineering Corp. ..... Marietta Center Bldg. Cincinnati 2 ..... DE1-6170
Ohio Cuno Engineering Corp. ..... 4811 Brookpark Rd. Cleveland 29 ..... CH1-1040
Pa Cuno Engineering Corp. ..... 121 Center Ave. Ardmore MI1-4041
Pa Cuno Engineering Corp. ..... 1010 Potomac Ave. Pittsburgh 15 ..... LO1-4400

CURTIS NUCLEAR CORP. ..... 1440 W. 120th St. Gardena, Cal.

Ariz Westinghouse Elec. Corp. X-Ray Div. 1303 N 51st Ave. Phoenix AL8-0021
Colo Technical Equipment Corp. ..... 527 Acoma St. Denver MA8-0082
Ill Westinghouse Elec. Corp. X-Ray Div. 3211 W Pershing Rd. Chicago FR8-2240
Kan Aviation Electronics, Inc. ..... 1009 N Mosley, Wichita HO4-5154
Kan Medical Electronics Inc. ..... 6114 Johnson Dr. Mission HE3-0007

Mich Westinghouse Elec. Corp. X-Ray Div. 5707 Trumbull Ave. Detroit TE2-7050
Minn Pengally X-Ray Co. ..... 6000 Excelsior Blvd. Minneapolis WE2-7000
Mo Block X-Ray Co. ..... 4000 Olive St. St. Louis FR1-0000
Neb Westinghouse Elec. Corp. X-Ray Div. 310 S 24th St. Omaha HA7544
NJ National X-Ray Co. ..... 71 S Hoover St. Hackensack HU2-0000
Utah Westinghouse Elec. Corp. X-Ray Div. 386 W S Temple St. Salt Lake City EL5-0410
Wash Westinghouse Elec. Corp. X-Ray Div. 1416 Olive Way, Seattle EA4-0700

CURTISS-WRIGHT CORP. ELECTRONICS DIV. 25 Kinkel St. East Paterson, NJ 191-4100

Cal Curtis-Wright Corp. ..... 13001 Van Owen St. North Hollywood TE7-6161
DC Curtis-Wright Corp. ..... 601 15th St. NW. Washington 5 ..... NA3-0004
NM Curtis-Wright Corp. ..... Box 6004, Albuquerque AM3-0701
Ohio Curtis-Wright Corp. ..... 810 W 1st St. Dayton 3 ..... BA4-0071

CURTISS-WRIGHT CORP. PRINCETON DIV. Box 112, Princeton, NJ

Cal Curtis-Wright, Princeton Div. ..... 7220 Varna St. N Hollywood PO4-0000
Pa C. Cassels ..... 199 Poplar Ridge Dr. Pittsburgh 35 ..... ST3-0000

CURTISS-WRIGHT CORP. RESEARCH DIV. Quakers, Pa AM3-0711

Cal Curtis-Wright Corp. ..... 13001 Van Owen St. North Hollywood TF7-2121
DC Curtis-Wright Corp. ..... 601 15th St. NW. Washington 5 ..... NA3-0004
Ohio Curtis-Wright Corp. ..... 810 W 1st St. Dayton 3 ..... BA4-0071

CUSTOM SCIENTIFIC INSTRUMENTS INC. 541 Dover St. Kenny, NJ FY7-4400

CUTLER-HAMMER, INC. ..... 472 N 12th St. Milwaukee 1, Wis BR7-7000

Cal Cutler-Hammer, Inc. ..... 1400 Industrial Way, Belmont LT1-7000
Cal Cutler-Hammer, Inc. ..... 6401 Rosedale Blvd. Los Angeles 22 ..... BA3-0001
Ga Cutler-Hammer, Inc. ..... 330-10th St. Atlanta 13 ..... TR6-0740
Ill Cutler-Hammer, Inc. ..... 4005 W Irving Park Rd. Chicago 24 ..... AY3-2000
Md Cutler-Hammer, Inc. ..... 2010 Maryland Ave. Baltimore 18 ..... HO7-0001
Mass Cutler-Hammer, Inc. ..... 410 Western Ave. Boston 35 ..... AL6-0330
Mich Cutler-Hammer, Inc. ..... 13427 Meadow Wilson Ave. Detroit 38 ..... TU3-1000
Mo Cutler-Hammer, Inc. ..... 4000 Main St. Kansas City 11 ..... WE1-7707
Mo Cutler-Hammer, Inc. ..... 6110 Page Blvd. St. Louis 30 ..... RA3-7711
NY Cutler-Hammer, Inc. ..... 6 W 48th St. New York 36 ..... PR9-0400
Ohio Cutler-Hammer, Inc. ..... 11300 Sonkland Rd. Cincinnati 40 ..... PR1-0000
Pa Cutler-Hammer, Inc. ..... 40 West Ave. Wayne TR9-0000

D.I.L.L. NUCLEAR CORP. ..... Via A. Barbini 30, Milan, Ital 422.496/540

DAGE TELEVISION DIV. THOMPSON RAMO WOOLDRIDGE INC. ..... W 246 St. Michigan City, Ind TR4-3251

Cal Dage Div.-TRW ..... 304 Hosley Ave. Inglewood OR3-0001
DC Dage Div.-TRW ..... 900 16th St. NW. Washington 6 ..... ST3-7070
Ga Dage Div.-TRW ..... 3070 Peachtree Rd. NE. Atlanta TR5-3010
Ill Dage Div.-TRW ..... 5010 W Lake Ave. Chicago SU8-0007
Tex Dage Div.-TRW ..... Braniff Airway Mid-Exchange Park, Dallas FL7-6171
Utah Dage Div.-TRW ..... 3400 Westwood Dr. Salt Lake City CR7-3481

DAIAC LABS.
DIXON CHEMICAL CO. ..... 5000 Langdon St. Phila. 24, Pa CH8-8271

DAMASCUS TUBE CO. ..... Box 70, Dunnville, Pa HA6-1000

Cal F. G. Smith ..... 1045 W Huntington Dr. Arcadia MU1-0000
Ill W. J. Dahl ..... 700 Deerfield Rd. Deerfield DE0-0000
Idd D. Downey ..... 4700 Springdale Ave. Baltimore LE3-0101
Mass J. M. Kirk ..... 40 Clinton St. Malden 48 ..... DA6-7100
Minn J. S. O'Rourke ..... 5235 Sheridan Ave. Minneapolis WA3-5071
NY G. J. Murphy ..... 30-34 Junction Blvd. Jackson Heights 72 ..... LO4-7007
Ohio R. H. Anding ..... 802 Delta Ave. Cincinnati 26 ..... EA1-0711
Pa J. A. Downey, Jr. ..... 2701 N Broad St. Philadelphia 40 ..... BA3-0040
Tex L. P. Saunder ..... 4301 Lee Jacinto St. Houston JA4-0001
Wash M. M. Moorman ..... 801 The Stage Bldg. Seattle 4 ..... MA4-0400

DARLING VALVE & MFG. CO. Williamsport 28, Pa 323-6171

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Cal A. C. Cope ..... 400 Bryant St. San Francisco EX3-0004
NY M. E. Evans ..... 500 5th Ave. New York City CH4-0017
NC M. E. Ashworth ..... 2100 Masonic Dr. Greensboro CY3-1780
Ohio F. E. Barlan ..... 1510 Jefferson Ave. Toledo CH8-0400
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Tex M. P. Murphy ..... Box 6443, Houston JA9-0007

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Ill Fasco Industries, Inc. ..... 6300 W Lawrence Ave. Chicago 30 ..... ES5-1418
Mich Fasco Industries Inc. ..... 13701 Fenton Ave. Detroit 27 ..... BR-1775
Mo Fasco Industries, Inc. ..... 1110 S Brentwood Blvd. St. Louis 17 ..... PA1-1000
NY Fasco Industries, Inc. ..... 400 Lexington Ave. New York 17 ..... OR-4170
Tex Fasco Industries, Inc. ..... 4004 Greenville Ave. Dallas EM9-2000

FEDERAL-MOGUL-BOWER BEARINGS, INC. ..... 10021 Shoemaker Ave. Detroit 13, Mich VO1-0720

Cal National Seal Div. ..... Broadway @ Mercantil Ave. Redwood City EM5-2001
Cal Monarch Div. ..... 1201 N Anden Dr. El Monte GI3-0001
Cal Aircraft Products Div. ..... 5200 Cerry St. Long Beach GA5-6470
Mich Federal-Mogul Div. ..... 11001 Shoemaker Ave. Detroit 13 ..... UO1-0700
Mich Bower Roller Bearing Div. ..... 3040 First Ave. Detroit 14 ..... VA3-7000
Pa Bearings Co. of America Div. ..... 501 Harrisburg Ave. Lancaster EX4-7101

FEDERATED METALS CANADA LTD. 1400 Kinnear St. Lachine, Quebec

FEEDBACK, LTD. ..... 1 The Broadway, Cowbourgh, Surrey, Eng CR2202

Aust R. J. T. Payne Pty. Ltd. ..... 800 Bridge Rd. Richmond Victoria ..... JB 1418
Belg. S. A. Gammelin ..... 66 Chaussee de Charleroi, Brussels, 6
Can The Glenden Instrument Co. Ltd. ..... 46 Carnfield Rd. Scarborough, Ontario PL6-0881
Ger Omni Ray, GmbH ..... Hyngbrechtsgrove, 104, Munchen 19 (081) 844400
Holl Superintendenten Elektrica ..... Bergsemraan 11, Amsterdam-w 94870
Swed Pieme J. C. Lagerstrom ..... Vestergatan 57, Stockholm 680780

FELIX ENGINEERING & MFG. CO. 6030 N Monticello Ave. Skokie, Ill CO7-0220

FELTON CO. THE ..... 170 South St. Boston 11, Mass LI2-7011

Cal Taylor Felt & Supply Co. ..... 710 Mission St. San Francisco
Cal Acme Mfg. Co. ..... 11600 Drury Ln. Los Angeles
Ill Felton Co. ..... 4046 W Belmont Ave. Chicago 41
Mich Felton Co. ..... 8-310 General Motors Bldg. Detroit 2
Mo Felton Co. ..... 1801 Lower N. St. Louis 3
NY Felton Co. ..... 1001 Empire State Bldg. New York 1
Pa Felton Co. ..... 428 McClarity Bldg. Upper Darby
Tex J. G. Mahler Co. ..... 1214 Wood St. Dallas

FENN MFG. CO. ..... 300 Pope Rd. Newington, Conn MO6-2671

Cal Machinery Sales Co. ..... 5000 Lennox Blvd. Los Angeles LO5-0111
Ill E. Thompson ..... 601 Pleasant St. Chicago DU5-0237
NY A. Allness ..... 441 Lexington Ave. New York 17 ..... MU7-0880
Wash Star Machinery Co. ..... 911 Leader St. Seattle 4 ..... MA3-0700

FERGUSON CO., R. E. ..... 1703 E 11 St. & Walnut, Cleveland 14, Ohio TO1-6400

Cal R. E. Ferguson Co. ..... 179 Montgomery St. San Francisco 4 ..... EX3-0884
NY R. E. Ferguson Co. ..... 150 E 42 St. New York 17 ..... OX7-0900
Tenn R. E. Ferguson ..... Box 1081, Oak Ridge LD250
Pr Ferguson Morrison-Knudsen, S.A.F.
10 Ave Victor Hugo, Paris 16e FOI-51-10

FERNSTEUERGERÄTE GMBH ..... 68-71 Schwetz, Berlin-Britz, Germany 62 04 51

FERRANTI ELECTRIC, INC. ..... Industrial Pk. #1, Plainview, NY

Cal R. Olander & Co. ..... 6333 Santa Monica Blvd. Los Angeles 38 ..... HO9-0303
Conn W. W. Janney Co. ..... Box 6104, Hamden ATS-8050
Fla ERCA, Inc. ..... Box 8216, Madeira Beach, St. Petersburg WA1-9986
Ill The Lowell Co. ..... 4324 Dickinson Terr. Skokie OR6-0987
Minn Owen Engineering Co. ..... 4348 Howland Dr. W, Orchard Lake EM8-1120
Minn Engineering Products Associates ..... 2119 Grand Ave. St. Paul 5 ..... MO5-0581
NJ G. Spanos Associates ..... 45 Kimball Dr. Teaneck, NY SP9-1500
NY Tweet Sales Eng. Co. ..... 164 Meadowcrest Rd. Meadowcrest MA7-7760
NY D. S. Lewis ..... Box 184, Eastwood Sta. Syracuse 4 ..... HE7-0101
NY G. Spanos Associates ..... 30 Rockefeller Plaza, New York 20 ..... PL5-4400
Ohio Tri-Tec, Inc. ..... 1317 E National St. Vandalia TW3-5400
Tex D & J Enterprises ..... Box 608, Grand Prairie AM5-3888

FERRANTI-PACKARD ELECTRIC LTD. Industry St. Toronto 15, Ont. Can WE2-3411

NY Ferranti Electric, Inc. ..... Rockefeller Plaza, New York

FIELDEN ELECTRONICS, LTD. Foston Rd. Byfleet/Surrey, Surr 22, Eng

Minn Wilson E. Young ..... 135-11th St. S, Minneapolis 3
Mo Fenco Engineering Co. ..... 9410 Cherbrook Ave. Kansas City 15
NY Fielden Electronics Inc. ..... Box 488, Huntington MT3-6965
NY Marshall Control Products Corp. ..... 60 E 42nd St. New York 17
Ohio L. Johnson Co. ..... 5000 E 138th St. Cleveland
Ohio L. Johnson Co. ..... 11300 Fremonte St. Cincinnati 41
Pa Fenco Western Inc. ..... 940 Western Ave. Pittsburgh 20
Pa Tri-State Technical Sales Co. ..... 135-11th St. S, Minneapolis 3
Wis G. Albert Co. ..... 3040 N 54th St. Milwaukee 10

FILTRONICS INC. ..... Box 300 Cowell, Cal GO5-4615

FINNEL SYSTEM INC. ..... 4000 East St. Elkhart, Ind

Cal A. Super ..... 5005 W Pico Blvd. Los Angeles WI5-7000
DC C. R. Young ..... 801 Mass. Ave. NW, Washington ME3-1200
Ill O. A. Minerd ..... 30 N Laramie, Chicago ES9-8040
Mass J. P. Conor ..... 441 Tremont St. Boston 16 ..... HA6-6111
Mich F. C. Foley ..... 1268 Broadway, Detroit WO1-9770
Mo J. S. Woodley ..... 4971 Washington Ave. St. Louis FO7-3200
Pa V. L. Watson ..... 413 Commonwealth Annex, Pittsburgh 22 ..... CO1-4000
SC H. H. Dickens ..... 27 Byrd Blvd. Greenville CE3-0005

FIRTH CLEVELAND INSTRUMENT LTD.
Tudweiliog Pentyrch, Glamorgan, Wales TRE2211

FIRTH-DERIHON STAMPINGS LTD.
Dale Rd. N Darley Dale Matlock, Derby, Eng SA4561

Mass Conrex Limited ..... 31 St. James Ave. Boston LI4425
Can Service Steel & Eng. Ltd. ..... 281 Parkdale Ave. N. Hamilton LE6-3510
Eng T. Firth & J. Brown Ltd. ..... 11 Hamilton Pl. London W.1 ..... GR9701

FIRTH STERLING INC. ..... 3110 Forbes Ave. Pittsburgh 30, Pa MO3-4400

Ala Firth Sterling, Inc. ..... 1204 Huntsville Rd. Birmingham 1 ..... FA4-0827
Cal Firth Sterling, Inc. ..... 2000 S Vail Ave. Los Angeles 22 ..... RA3-9736
Conn Firth Sterling, Inc. ..... Box 113, Elmwood Sta. Hartford 10 ..... JA3-6386
Ill Firth Sterling, Inc. ..... 5415 North Ave. Melrose Park FM-6510
Mich Firth Sterling, Inc. ..... 6000 W Chicago Blvd. Detroit 4 ..... WE3-1000
NJ Firth Sterling, Inc. ..... 201 Sheffield St. Mountainside AD2-7710
Ohio Firth Sterling, Inc. ..... 5001 St. Clair Ave. Cleveland 10 ..... TO1-0100
Tex Firth Sterling, Inc. ..... 600 S 75th St. Houston 23 ..... WA2-5107

FISCHBACH & MOORE ..... Box 7728, Dallas 26, Tex RA4-1191

FISCHEL CO., ERNEST L. ..... 150 Broadway, New York 38, NY CO6-8891

Swiss A. Langenhagen ..... Perlgraben 4, Zurich 27-13-42

FISCHER & PORTER CO. ..... 20 Warminster Rd. Warminster, Pa OS6-4000

Cal B. A. Arm ..... 130 Orangethorpe Way, Anaheim LA6-7742
Colo L. M. Rob ..... 5153 S Bellaire, # 1, Denver 22 ..... SE5-7060
Ill T. A. Rae ..... 1305 S 6th Ave. Maywood FR-3060
Md A. Boehler, Jr. ..... 1007 York Rd. Towson 4
Minn S. A. Kincher ..... 3000 Highland Ave. Hopkins 92 ..... EM4-6700
Mich J. W. Marr ..... 22750 Woodward Ave. Detroit 19 ..... LI5-0900
Mo Durkin Equipment Co. ..... 3004 Clayton Rd. St. Louis 24 ..... WY2-0900
NY D. T. Conch ..... 141 Main Ave. Clifton, NJ GR9-0600
Pa C. J. Lowe ..... 6 & Fayette Sts. Conshohocken TA9-0404
Tex M. G. Hall ..... 4001 Interstate Ln. Dallas 5 ..... LA6-0000
Utah Wayne Wisenoh Co. ..... Box 19, Sugarhouse Sta. Salt Lake City 5 ..... EL2-0021
Wash C. J. Sandoval ..... 3000-5th Ave. S, Seattle 4 ..... MA2-0440

FISA-SCHUMAN CORP. ..... 70 Potters Rd. New Rochelle, NY NO6-1200

FISHER GOVERNOR CO. ..... Box 207, Marshalltown, Iowa ..... [illegible]

Cal R. R. Jones & Co. ..... 2204 E 8th St. Los Angeles 21 ..... MA7-3207
Ga J. M. Smither & Co. ..... Box 11973, Atlanta 5 ..... CE7-0270
Ill General Meters & Controls Co. ..... 305 W Washington St. Chicago 6 ..... AN3-7020
Md Meters Controls Co. ..... 2011 N Charles St. Baltimore 18 ..... HO7-0271
Mass C. R. Perry & Co. ..... 10 Kearney Rd. Needham Heights 94 ..... HA4-1700
Mich Dubois-Webb Co. ..... Box 0217, Detroit BR3-0800
Mo H. D. Hale & Co. ..... 3139 Bemiss Ave. St. Louis 17 ..... MO7-0800
NY Crabbe & Dubois Co. Inc. ..... Box 440, Englewood Cliffs, NJ LO8-0513
Ohio A. E. Stein & Co. ..... Box 4505, Cleveland 24 ..... HE2-0340
Pa C. R. Ives & Co. Inc. ..... Box 218, Hatboro TY7-0405
Tex Fuller-Davison, Inc. ..... Box 22005, Houston 27 ..... CY4-0341
Wis W. R. Stein & Co. Inc. ..... 2844 W Atkinson Ave. Milwaukee 9 ..... HO4-7000

FLANDERS FILTERS, INC. ..... Box 710, Rockford, NY PA7-3102

Cal Air Conditioning Supply Co. ..... 1371 S Anderson St. Los Angeles AN3-7406
Colo R. L. McMahon ..... Box 5344, Denver HA4-0620
Ill Thermal Range Products Co. ..... 6001 W Lake, Chicago 44 ..... CO1-0500
Mass Airadyne Co. ..... 1030 Comm St. W Roxbury 32 ..... FA4-1100
Mich F. T. Schreiner ..... 100 Pendleton Bldg. Detroit WO8-1270
Minn E. A. Berg ..... 3000 Edgewood Ave. S Minneapolis WE3-0441
NJ S. S. Tapp ..... 313 High St. Metuchen LE-7000
NY Associated Thermal Prods. Inc. ..... 304 Broadway, New York 13 ..... CH7-0900
Ohio Lewis Thermal Equipment Co. ..... 3661 N High St. Columbus 14 ..... AM3-0213
Pa Mentzer Co. ..... Township Line Rd. & Wash Ln. Jenkintown TY7-0900
Tenn Rogers & Morgan ..... 800-10th St. Knoxville EM3-7942
Tex H. O. Knape & Co. ..... 3834 South St. Dallas 4 ..... RI7-7000

FLEISCHMAN, HORN & CO., INC. 1377 Ave. of Americas, New York 20, NY PL7-3400

FLEXAUST CO. ..... 300 Park Ave. New York 17, NY HE7-2400

Colo R. N. Morey ..... 3500 Denver Club Bldg. Denver 2 ..... AL5-0600
Ga C. A. Wright ..... Box 10001, Atlanta CE7-0870
Ill S. J. Scofield ..... 407 S 4th St. Geneva CE2-0005
La W. E. Evans & Co. ..... 1100 St. Thomas St. New Orleans 12 ..... JA5-1400
Mich The Lape Co. ..... 3000 Nickerson Ave. NE, Grand Rapids 5 ..... EM1-4037
NY G. R. Tompkins ..... 242 Carolina St. Rochester 20 ..... HE-9004

FLEXIBLE LTD. ..... Rock Rd. Trafford Pk. Manchester 17, Eng

NY Sealed, Inc. ..... Providence 5, RI GT1-0700
Aus Flexibles Pty. Limited ..... Box 51, Footscray W, W13, Victoria MW0661
Fr Flexibles S. A. ..... 38 Rue de Tarvin, Paris 9 ..... PRO-70
Ger Flexibles GmbH ..... Schelmer 45, Frankfurt/Main-Ost 480005
Holl Flexibles N. V. ..... Mauritskade 10b, The Hague 11.18.21
Ital Flexibles SpA ..... Via Mauro Macchi 27, Milano 800 ..... 67.68.50

FLEXITALLIC GASKET CO. ..... 6th & Bailey, Camden, NJ WO3-1120

FLEXONICS DIV. CALUMET & HECLA, INC.
450 E Devon Ave. Bartlett, Ill TE7-5011

Ala Flexonics ..... 915 Bob Wallace Ave. Huntsville EU-4501
Cal Flexonics ..... 1405 Seybert Blvd. San Francisco 94 ..... DE3-6275
Cal Flexonics ..... 1819 W Chapman, Orange KI7-5033
Mass Flexonics ..... 10 High St. Boston 10 ..... HA6-0580
Mich Flexonics ..... 21000 Harwood Ave. Detroit 24 ..... FO6-7100
Mo Flexonics ..... 2000 Craigmont Terrace, Crestwood 26 ..... VO-1055
NJ Flexonics ..... 1140-45 E Jersey St. Elizabeth EL4-0800
Ohio Flexonics ..... C & Renkewe Co. Bldg. Cincinnati 27 ..... RE1-0800
Ohio Flexonics ..... 2800 Beachwood Rd. Cleveland 6 ..... HE6-4000
Pa Flexonics ..... 18 W Chelten, Philadelphia 44 ..... VI3-7000
Tex Flexonics ..... Meadows Bldg. Dallas 6 ..... EM4-6100

FLIGHT REFUELING INC. ..... Box 1700, Baltimore 3, Md SU6-3900

Cal W. E. Slavin ..... Box 942, Inglewood OR8-0207
Colo R. A. Price ..... Box 401, Littleton PY4-0007

FLIGHT REFUELING, LTD. ..... Tormat Rushton Mill, Stanford, Dorset, Eng BL501

FLODYNE CONTROLS, INC. ..... 1701 Elizabeth Ave. E, Linden, NJ WA5-5300

FLOW-ACTUATED CONTROL CO., INC. ..... 17-19 Park Row, New York 38, NY

FLOW CORP ..... 11 Cambridge St. Cambridge 42, Mass TR4-9043

Cal G. H. Vaughan Co. ..... 1000 E Foothill Blvd. Pasadena MU7-4011
DC F. R. Jones, Inc. ..... 4802 St. Elmo Ave. Bethesda, Md OL3-3134
Iowa Engineering Services Co. ..... 1305 Oakland Gardens, Cedar Rapids EM2-4183
Kan Engineering Services Co. ..... 247 S Pinecrest, Wichita MU3-3751
La Dunnwiller-Smith, Inc. ..... 3722 W Mockingbird Ln. Dallas, Tex FL7-8240
Md F. R. Jones, Inc. ..... 4802 St. Elmo Ave. Bethesda OL3-3110
Mich J. L. Potter Co. ..... 16006 Joann Centers Hwy. Detroit UO2-3171
Mo Engineering Services Co. ..... 6717 Vernon Ave. St. Louis FA6-0220
NJ Crane & Egert Corp. ..... 97 Reade St. New York, NY WO4-0066

TERR	MANUFACTURERS SALES/OR REPRESENTATIVES OFFICES	TEL. NO.
NY	Crane & Agent Corp. ..... 97 Reade St, New York	WO6-6860
Tex	Dunwoodie-Smith, Inc. ..... 02180 Westheimer, Houston	HO6-6397
Can	Redington, Limited ..... 6300 Hingnal St, Montreal 9, Que	HU-6317
	FLOWLINE CORP. ..... New Castle, Pa	OLA-3541
Cal	Flowline Corp. ..... 4701 E 3rd St, Los Angeles 23	AN6-3970
Colo	D. W. Jones, Jr. ..... 1301 Bannock St, Denver 4	KE4-6711
NY	Flowline Corp. ..... 350 Broadway, New York 7	WO6-6860
Okla	C. K. Parkinson ..... 10001 E Admiral Pl, Tulsa	TS5-7070
Tex	Flowline Corp. ..... 6310 Edith St, Houston 36	MA2-6423
Wash	C. J. Roberts ..... 1940-45 6th Ave, S, Seattle 4	MA3-6121
	FLUKE MFG. CO., INC. JOHN ..... Box 7428, Seattle 98, Wash	PR6-1171
Cal	McCarthy Associates, Inc. ..... 1005 E Walnut St, Pasadena	MU7-7411
Ill	Cameron & Cadsby, Inc. ..... 135 Old Orchard Arcade, Skokie	OR6-8700
Md	Norman Associates, Inc. ..... 941 Halfway Ave, Rockville	WA7-7500
Mass	Technical Instruments, Inc. ..... 89 Main St, Reading	WE3-3000
Minn	Pillsbury & Hine Co. ..... 1935 Hoselle Ave, Minneapolis 5	FR6-6800
NJ	C. C. Engel & Associates, Inc. ..... 210 S Broad St, Ridgewood	GR-1400
NM	G. French Co. ..... 1000 Zuni St, SE, Albuquerque	AM6-0470
NY	J. D. Hyman, Inc. ..... Box 1400, Syracuse 7	GR-1771
NC	Hinkle & Caldwell, Inc. ..... 1020 N Main, High Point	5-6875
Ohio	M. P. Odell Co. ..... 20014 Center Ridge Rd, Westlake	TE1-6000
Tex	Dunwoodie-Smith, Inc. ..... 5712 W Mockingbird Ln, Dallas	FL7-1840
Wash	E. S. Drake Associates ..... 1217 Norman St, Seattle 44	EA3-8545
	FLUKE PRODUCTS CO. ..... Box 1267, Santa Rosa, Cal	LD-2261
Ala	J. W. Robertson & Co. ..... 1212-18th Ave, S, Birmingham 9	TW-3402
Cal	Fluke Products Co. ..... 2000 W 6th St, Los Angeles 5	DU5-6021
Cal	Kelsch-Spaulding Co. ..... 555 Market St, San Francisco	DO2-6000
Colo	G. M. Wallace & Co. ..... 104 Denham Bldg, Denver 2	AM6-7266
Ill	Fluke Products Co. ..... 6105 W North Ave, Oak Park	VI9-0100
Minn	Farrell & Jones ..... 10 High St, Boston 10	HA5-1700
Mo	Kansas City Equipment Co. ..... 4708 Holly St, Kansas City 12	FL3-0737
NY	Fluke Products Co. ..... 400 6th Ave, New York	ELS-0740
Okla	D. E. Fields ..... 320 Mayo Bldg, Tulsa	RU3-6377
Pa	J. A. Brown Co. ..... 1000 Walnut St, Philadelphia 3	KI6-7300
Pa	R. C. McIlvaine Co. ..... 3000 Willow Ave, Pittsburgh 24	FI1-0533
Tex	Fluke Products Co. ..... 2337 Old Spanish Tr, Houston 21	HY-6603
	FOOTE MINERAL CO. ..... 18 W Chelten Ave, Phila 44, Pa	VI6-4000
	FORD, BACON & DAVIS, INC. ..... 2 Broadway, New York 4, NY	DI6-3210
Cal	Ford, Bacon & Davis, Inc. ..... 555 Montgomery St, San Francisco 4	EX7-3661
Ill	Ford, Bacon & Davis, Inc. ..... 135 S LaSalle St, Chicago 3	CE3-9100
La	Ford Bacon & Davis Construction Corp. 1000 Jackson St, Monroe	FA3-2001
	FORGES & ATELIERS & CONS. ELECTRIQUES de JEUMONT 5 pl. Rio-de-Janeiro, Paris 8e, Fr	CARN-40
	FORMO SCIENTIFIC CO. ..... 833 Lincoln St, Evanston, Ill	DA6-5729
	FOSTER CO., BENJAMIN ..... 4635-37 W Girard Ave, Philadelphia 31, Pa	TR-2300
Cal	B. Foster Co. ..... Box 2008, Hilton	ST7-6013
DC	J. R. Harvey ..... 5716-14th St, NW, Washington	TA2-6002
Fla	G. C. Bell ..... 3017 Bird Rd, Jacksonville 11	EL6-6237
Ga	J. F. Johnson ..... 3330 Peachtree Rd, NE, Atlanta 5	EM-7360
Ill	R. W. Weaver ..... 204 Hazelwood Rd, Riverside	DE7-0400
Mich	C. P. Lynch ..... 2000 Columbus, Pontiac	EM-0001
Mo	B. Foster Co. ..... Box 300, St. Joseph	AD6-0002
NY	E. A. Infelch ..... Old Mountain Rd, Upper Nyack	CO7-0000
Pa	G. A. Parker ..... 607 Investment Bldg, Pittsburg 22	GR1-7202
Tex	B. Foster Co. ..... 10115 Spalding Rd, Houston	HO7-3300
Can	B. Foster Co. ..... 1024 Weller St, Windsor, Ont, Canada	CL3-8014
	FOSTER INSTRUMENT CO. LTD. Letchworth, Herts, Eng	
	FOSTER TRANSFORMERS LTD. Gordon Rd, London, SW19, Eng	LI2211
Eng	Foster Transformers, Ltd. ..... Paradise St, Birmingham, 1	MIDDLE
Eng	Foster Transformers, Ltd. ..... 80 Victoria St, Bristol, 1	BRS-4053
Eng	Foster Transformers, Ltd. ..... 12 Princes St, Ipswich	IPS-0341
Eng	Foster Transformers, Ltd. ..... 1 King St, Leeds, 1	LE3-0497
Eng	Foster Transformers, Ltd. ..... 2 St. James Tour, Nottingham	NOT-0000
Eng	Foster Transformers Ltd. ..... St. Peter's Square, Manchester 1	CEN40
Eng	Foster Transformers, Ltd. ..... 30-34 Mosley St, Newcastle-on-Tyne, 1	NE3-4031
Ire	Foster Transformers Ltd. ..... 23-7 Adelaide St, Belfast 2	BEL-8000
Scot	Foster Transformers, Ltd. ..... 5 Woodside Pl, Glasgow, C.3	DOUGLAS
Wls	Foster Transformers, Ltd. ..... 60 Churchill Way, Cardiff	CAR-7701
	FOSTER WHEELER CORP. ..... 165 5th Ave, New York 10, NY	JU5-6400
Cal	Foster Wheeler Corp. ..... 720 W Olympic Blvd, Los Angeles 15	RI-7000
Cal	Foster Wheeler Corp. ..... 9 1st St, San Francisco 5	GA1-0042
DC	Foster Wheeler Corp. ..... Tower Bldg, Washington 5	DI7-0322
Ga	W. D. Tankson & Associates ..... Box 11008, Northside Sta, Atlanta 5	CE7-0811
Ill	Foster Wheeler Corp. ..... 105 W Adams St, Chicago 3	RA6-4070
Mass	Foster Wheeler Corp. ..... 80 Federal St, Boston 10	HA5-0127
Mich	Foster Wheeler Corp. ..... Michigan Bldg, Detroit 26	WO1-0400
Ohio	Foster Wheeler Corp. ..... Leader Bldg, Cleveland 14	MA1-0225
Pa	Foster Wheeler Corp. ..... Oliver Bldg, Pittsburgh 22	AT1-4007
Pa	Foster Wheeler Corp. ..... Packard Bldg, Philadelphia 2	LO6-1200
Tex	Foster Wheeler Corp. ..... 711 Main St, Houston 2	CA2-7204
Wash	Foster Wheeler Corp. ..... 800-108th NE, Bellevue	GL4-7205
	FOX & CO., LTD., SAMUEL ..... Sheffield Wks, Sheffield, Eng	NORTH
NY	Lewis Steel & Trading Corp ..... 111 5th Ave, New York 17	
	FOXBORO CO. ..... 38 Neponset Ave, Foxboro, Mass	RI3-2760
Cal	Foxboro Co. ..... 200 Peale St, San Leandro	LO2-6535
Cal	Foxboro Co. ..... 1212 S Garfield St, Alhambra	CU2-6570
Colo	Foxboro Co. ..... 2000 E 2nd Ave, Denver 6	DE3-6327
Ga	Foxboro Co. ..... 3000 Mabry Dr, Chamblee	457-1354
Ill	Foxboro Co. ..... 4646-8 Oakton St, Skokie	OR6-6060
NY	Foxboro Co. ..... 420 Lexington Ave, New York 17	LE5-4800
Ohio	Foxboro Co. ..... 1210 W 117th St, Cleveland 7	AC5-1000
Pa	Foxboro Co. ..... 1 Bala Ave, Bala-Cynwyd	GR7-0000
Pa	Foxboro Co. ..... 2000 Bakewell Bd, Pittsburgh 6	WA3-2000
Tex	Foxboro Co. ..... 12710 E Northwest Hwy, Dallas 10	DA7-6531
Tex	Foxboro Co. ..... 3010 South Blvd, Houston 6	JA8-0481
	FRANKLIN ELECTRONICS, INC. E 4th St, Bridgeport, Pa	BR2-4000
Cal	T. L. Skinner Co. ..... 5054 W Pico Blvd, Los Angeles 19	WH3-5174
Cal	T. L. Skinner Co. ..... 7814 Ivanhoe Ave, La Jolla	GL4-5181
Cal	T. L. Skinner Co. ..... 610 S Mathilda Ave, Sunnyvale	RE5-8733
Fla	ECRA, Inc. ..... Box 6215, Madeira Beach, St. Petersburg	ST FRG 8604
Ill	Midwest Electronic Sales ..... 4800 N North Ave, Chicago 47	BA5-5550
Md	Lemon Associates, Inc. ..... 600 Ingleside Ave, Baltimore	MA-5875
Mass	Rae Engineering Sales ..... 500 Walnut St, Newtonville 60	LA7-4000
NC	J. L. Highsmith & Co. ..... 3703 Monroe Rd, Charlotte 5	PE7-0540
Pa	Emson Instrumentation, Inc. ..... 515 W Chelten Ave, Philadelphia	VI5-3800
Tex	Industrial Associated Electronics ..... 3011 Farrington St, Dallas	RI3-4777
Pw	Sonar International Corp. ..... 80 Broad St, New York City 4, NY	WH4-7000
	FRANKLIN INSTITUTE LABS. Philadelphia 3, Pa	LO4-3000
	FRANKLIN SYSTEMS, INC. ..... 2734 Hillsboro Rd, West Palm Beach, Fla	TE3-4000
Cal	C. A. Stone Associates, Inc. ..... 6071 National Blvd, Los Angeles 34	UP6-7771
Cal	C. A. Stone Associates, Inc. ..... 686 N San Antonio Rd, Palo Alto	DA3-2704
La	Delta Electronics, Inc. ..... 621 Homedale Ave, New Orleans 24	AU9736
Md	C. E. Snow Co. ..... 5218 Wisconsin Ave, Bethesda	OL4-1707
Ohio	Research Development Production Assoc. 5200 Huberville Ave, Dayton 31	CL3-8175
Pa	C. E. Snow Co. ..... 618 Cheltenham Ave, Philadelphia 38	CA4-5200
Tex	Industrial Associated Electronics, Inc. 310-8 Intl. Airport, El Paso	PR2-3441
Tex	Ind. Assoc. Electronics, Inc. ..... 3011 Farrington St, Dallas	RI3-4777
Wash	Instrumentation Engineering ..... 1101-3rd Ave, Bldg, Seattle 1	MA2-5000
Pw	Sonar International Corp. ..... 80 Broad St, New York 4	WH4-7000
	FRASER & CO. LTD., U. J ..... Howard Hill, Bradford, Essex, Eng	BRADFORD
Aus	W. J. Fraser & Co. Ltd. ..... 300 Lonsdale St, Melbourne	
S Af	W. J. Fraser & Co. Ltd. ..... 62 Marshall St, Johannesburg	
	FRAZAR & HANSEN LTD. ..... 351 City St, San Francisco, Cal	
	FRIEDN THERMOMETER CO., INC 1738 Gardnell St, Brooklyn 27, NY	EV6-1300
Cal	R. G. Meyer Co. ..... 116 E Stevenson Ave, Alhambra	
Cal	F. W. Moulthrop ..... 575 10th St, San Francisco 3	
Colo	Nelson Co. ..... 700 E Louisiana Ave, Denver 10	
Ga	F. Fasnett & Son ..... 771 Piedmont Ave, NW, Atlanta	
Ill	H. L. Quick ..... 601 Sherman St, Evanston	
Md	R. White & Co. ..... 1106 Mondawmin, Baltimore 15	
Mass	H. P. Segal Co. Inc. ..... 300 Washington St, Brookline 46	
Mo	Automatic Gas. Elec. Sales. ..... 6540B Trent Ave, Kansas City 6	
NY	M. P. Andrews, Inc. ..... 219 Mott Rd, Fayetteville	
Ohio	Sonar & Griffin, Inc. ..... 1836 Euclid Ave, Cleveland	
Pa	W. Drew & Co. ..... 146 N Narberth Ave, Narberth	
Wash	W. K. Wiblstrand ..... 216 1st Ave, N, Seattle 9	
	FRESENIUS & HUEPPNER GMBH Königstr-Bonn, Germany	2321
Aus	Ingenieurbüro, Mathewitsch & Co. ..... Mariahilferstr. 120, Wien XV	4-7026
Belg	F.C.B. Dept. Elec. & Phys. Meas. 12, Rue de Télephone, Brussel	1720000
Den	Ole A Bertelsen ..... Pilestr. 35, Kopenhagen - K	MD9911
Eng	B & K Laboratories Ltd. ..... 4 Tilbury St, Park Ln, London W 1	GRO657
Fr	Parts-Labo ..... 7 Rue de Cardinal-Lemoine, Paris	MEZ2-50
Gr	K. Kampouris ..... Kentrikí Sq, Athen	32203
Holl	Ingenieursbureau Perfecto ..... Prinsengracht 530, Amsterdam	31-5000
Ital	Sanar S.R.L. ..... Via Pergolesi 4, Milano	680000
Spn	Esmar y Cia. ..... Apartado 215, Vigo	2210
Swed	Kemikalieinstitutet KIMO AB ..... Norra Järnvägsgr 135, Stockholm	248700
Swit	Tesla, Tauber & Co. AG ..... Ampérestr. 3, Zurich	451030
	FUJI ELECTRIC MFG. CO., LTD 2-6 Hatanodai, Shinagawa-ku, Tokyo, Jap	201-7111
Jap	Fuji Electric Mfg. Co. Ltd. ..... 2-4 Dojima Hama-dori,Kita-ku, Osaka-shi (312)5121	
Jap	Fuji Electric Mfg. Co. Ltd. ..... 1 Sakae-bashi-dori Tayama-shi ..... (0)1175	
Jap	Fuji Electric Mfg. Co. Ltd. ..... 6-4 Hyogo-machi Takamatsu-shi ..... (0)8630	
Jap	Fuji Electric Mfg. Co. Ltd. ..... 2-4-2 Takasago-cho Ube-shi ..... (0)8177	
Jap	Fuji Electric Mfg. Co. Ltd. ..... 9 Kamiya-cho Hiroshima-shi ..... (0)8246	
Jap	Fuji Electric Mfg. Co. Ltd. ..... 2-6 Hirokoji-dori Naka-ku, Nagoya-shi ..... (0)5121	
Jap	Fuji Electric Mfg. Co. Ltd. ..... 69 Tenjin-cho Fukuoka-shi ..... (0)8121	
Jap	Fuji Electric Mfg. Co. Ltd. ..... 13-144 Osaka-cho Kokura-shi 0664	
Jap	Fuji Electric Mfg. Co. Ltd. ..... 8-1 Kita-aiyo-shiki Sapporo-shi ..... (0)3141	
Jap	Fuji Electric Mfg. Co. Ltd. ..... 11 Higashi-ichiban-cho, Sendai-shi ..... (0)3148	
	FULMER RESEARCH INSTITUTE Imperial Way, Stocks, Eng	
	GFS. DIV. GENERAL PRECISION INC. 45 Rockland Rd, Pleasantville, NY	OR6-4900
Cal	Dayco Electronics, Inc. ..... 310-311 Tech St, San Francisco	PR6-4811
DC	Video Engineering Co., Inc. ..... 1415 Georgia Ave, NW, Washington 11	TU3-5000
Ill	Illinois Electronic Systems ..... 1319 Brummel St, Evanston	MR3-5024
Mass	Dennison Electronics ..... 340 Boylston St, Brookline	AT7-4455
Mo	Central States Electronics, Inc. ..... 439 S Bode, St. Joseph	AD8-3044
New	Turner Electronic Engrg. Co. ..... 400 Moore St, Reno	PA6-5180
NY	Rent. Theatre Supply Co. ..... 108 W 44th St, New York 36	CI6-4204
NY	Picturetex Corp. ..... 106 E 48th St, New York 17	TU6-2710
NY	Hi-Fi-Tel Distributors, Inc. ..... 2016 Monroe Ave, Rochester 18	BR1-7000
Tex	Carter Sound Equip. Co. ..... 3220 Vantage St, Dallas	RI1-9454
Utah	Applied Engrg. Prods. Co. ..... 456 First Bldg, Salt Lake City	EM4-4848
	GARFIELD SCIENTIFIC CORP. 1237 Maplewood Ave, Chicago, Ill	RO1-8000
	GALLENKAMP & CO., LTD. A. Sun St, London EC 2, Eng	10661
	GAMMA INDUSTRIE ..... 22 Rue de Bonlanque, Paris 9, Fr	TRUDAINE
Aus	Dipl. Ing. Edmund Mirth ..... Kirchengasse 38, Wien VII	44 14 66
Ger	Präzision & Feinpiker GmbH ..... Erlangen-Bruck	2021461
Ital	Dr. Ing. E. Bertoni ..... Via Monebello 30, Milan	600000
Swit	Holger Andersen AG ..... Tiefenhöfe 11 - Bern 6	031/21079
	GAMMA INDUSTRIES, INC. ..... Box 2543, Baton Rouge, La	DR-3601
	GARDE MFG. CO. ..... 12 Julia St, Cumberland, Md	
Cal	Portmuth Electronic Assoc. ..... 5017 W Washington Blvd, Los Angeles	WE1-1041
Fla	Chris Small ..... Box 1346, Orlando	OR4-0971
Ill	Wesley Wilson Co. ..... 6202 W Higgins Ave, Chicago 30	AV3-4056
NY	A. F. Schulze ..... 66 Oxford Rd, New Hartford	RD3-5266
NY	A. P. Maxwell ..... 81 Irving Ave, Brooklyn 27	BY7-4070
Ohio	J. Powers ..... 402 Sylvan Ave, Dayton	CH-4663
Pa	D. G. Quinlan Co. ..... National Bank Bldg, Ambler	MO9-7350
	GARLOCK ELECTRONIC PRODUCTS, GARLOCK INC. Camden 1, NJ	
Cal	B. Bray ..... 13 N Mentor Ave, Pasadena	MU3-3753
Cal	Sales & Engrg. ..... 686 Waverly St, Palo Alto	DA5-8222
Colo	R. E. Corby Co. ..... 1700 Palmer St, Denver 8	LT1-4000
Fla	R. K. Wallace Assoc. Inc. ..... Box 87, Lutz	WE9-3042
Ill	Hill & Gray, Inc. ..... 621 Garfield St, Oak Park	WA6-7000
Ind	Southern Sales Co. ..... 105 Lakeshore Dr, Angola	AN7777
Mass	Abbott & Shank ..... 2564 Highland Ave, Needham Hl	HI4-5470
Mich	G. Shaffer Co. ..... 14801 Fenkel Ave, Detroit 27	WA6-6900
NJ	J. P. Dowie Co. ..... Box 86, Mountain Lakes	
Ohio	Sonar & Griffin, Inc. ..... 1836 Euclid Ave, Cleveland 15	TO1-5050
Pa	Hawkins-Schaker & Co. ..... Sutton Sta, Bldg, Philadelphia 9	LO6-3194
Can	Lake Engineering Co. Ltd. ..... 707 Harden Ave, Scarborough, Ont	PL7-2222
	GARRETT CORP. ..... 9851 Sepulveda Blvd, Los Angeles 45, Cal	
	GAST MFG. CORP ..... Box 1174-6, Benton Harbor, Mich	YA6-0171
Ariz	Air Automation Machine Supply ..... 1040 Grand Ave, Phoenix	AL4-0247
Cal	Brunner-Fiedler & Assoc. Inc. ..... 1020 Mednen Ave, Los Angeles	WE3-2511
Cal	J. Wilber Co. ..... 450 Mather St, San Francisco 11	TU8-0797
Conn	E. J. Chilcoat ..... 111 Pearl St, Hartford 3	CH7-1000
Ga	J. E. Wamsa & Co. ..... 121 N Woodland Dr, Marietta	428-8423
Minn	Midwest Machine Tool Supply ..... 2717 E Franklin St, Minneapolis 4	FR6-2838
NY	R. S. Business Associates ..... Box 371, Buffalo	TX4-8194
NC	L. W. Kinnear & Co. Inc. ..... 120 W Worthington, Charlotte 3	FR6-7553
Ohio	Cleveland Pump & Supply Co. ..... Bankeldier Bldg, Cleveland 19	CE3-1040
Ore	Pacific Pumping Co. ..... 605 NW Broadway, Portland 9	CA8-6121
Pa	W. Schwarz ..... 107 E Ellet St, Philadelphia 19	CH7-4102
Tex	Vermack Machine Supply Co. ..... 1010 Elm St, Dallas 99	FL7-5871
	GATES & CO., INC. GEORGE K. Hampstead Tyne, Near NE6, Franklin Square, NY	PO-6007
	GEIPEL LTD. WILLIAM, VULCAN WKS. 156/170 Bermondsey St, London, SE1, Eng	
	GEISLER LABORATORIES ..... Box 202, Rowland Hgts, Cal	RH-8571
Cal	Western Electronic Associates ..... 1841 Lemona Ave, Van Nuys	
Ohio	Tilby Co. ..... 1040 Wunsnville Center Bd, Cleveland	
	GELMAN INSTRUMENT CO. ..... Box 1756-H, Chelsea, Mich	GR9-4221
	GEN. D'ELECTROCITE, CIE ..... 54 rue La Boetie, Paris 8, Fr	ELT40-01
	GENERAL ALLOYS CO. ..... 480 W 1st St, Boston 27, Mass	AN5-1710
Ala	H. G. Meyer Co. ..... 518 American Life Bldg, Birmingham 3	FA3-2004
Cal	National Furnace Co., Inc. ..... 1801 Tunnel Blvd, 1 Gate	LO9-4149
Colo	T. Jones ..... Box 7497, Denver 15	MA3-5250
Ill	General Alloys Co. ..... 206 S Michigan Ave, Chicago	HA7-6052
Ind	G. O. Dunsmith Co. ..... Box 88008, Indianapolis 8	WA3-9400
Md	E. Gerhanes, Jr. ..... 433 N Charles St, Baltimore 1	MA5-7004
Mich	General Alloys Co. ..... 8-147 Gen. Motors Bldg, Detroit 2	TR6-9700
NY	General Alloys Co. ..... 59 Church St, New York 7	BA7-0021
NY	General Alloys Co. ..... Box 1265, Buffalo 59	TL6-1710
Ohio	General Alloys Co. ..... 6800 E 32nd St, Cleveland 15	RU1-0070
Pa	B. F. Oltman, General Alloys Co. ..... Box 102, Southampton	EL7-0000
	GENERAL AMERICAN TRANSPORTATION CORP. ..... 135 S LaSalle St, Chicago 3, Ill	FR6-6000
Ala	Gen Amer Transportation Corp. ..... Box 1270, Birmingham	VU-6600
Cal	Gen Amer Transportation Corp. ..... 500 Wilshire Blvd, Los Angeles 17	MA8-1267
Cal	Gen Amer Transportation Corp. ..... 555 Montgomery St, San Francisco 4	DO2-0222
La	Gen Amer Transportation Corp. ..... 210 Baronne St, New Orleans 12	LA4-0500
NY	Gen Amer Transportation Corp. ..... 350 Madison Ave, New York 17	OX7-3225
Ohio	Gen Amer Transportation Corp. ..... 1307 Terminal Tower Bldg, Cleve 13	PR1-1201
Okla	Gen Amer Transportation Corp. ..... 1001 1st Natl, Bank Bldg, Tulsa	LU3-6137
Pa	Gen Amer Transportation Corp. ..... 2012 Koppers Bldg, Pittsburgh 19	GR1-8101
Tex	Gen Amer Transportation Corp. ..... 1st Natl, Bank Bldg, Dallas 2	RU-0000
Tex	Gen Amer Transportation Corp. ..... 819 Bank of the Southwest Bldg, Houston 2	CA4-1001
Utah	Gem Plan ..... Box 97, Salt Lake City	PR-8000
	GENERAL APPLIED SCIENCE LABS, INC. Merrick & Stewart Ave, Westbury, NY	ED5-4040
Ala	Aero-Tec ..... 903 Bob Wallace Ave, Huntsville	JO-7581
Cal	Boyd Engineering Co. ..... P.O. Box 788, Sunnyvale	AX8-0410
Cal	H. Gen Associates, Inc. ..... 14474 Dickens St, Sherman Oaks	ST6-6002
Fla	ECRA, Inc. ..... Box 6215, St. Petersburg	WA1-9726
Kan	Hanson, Inc. ..... 6407 E Kellogg, Wichita 19	MO4-3834
Md	L. G. White & Co., Inc. ..... 500 Bradford St, Silver Spring	JU5-5540
Mass	The H. J. Schaft Co. ..... 815 Washington St, Newtonville	LA7-4004
NM	E. G. Miller Co. ..... 210 Cagua Dr, NE, Albuquerque	AL6-1505
NY	Land-C-Air Sales Co. ..... 76 Main St, Tuckahoe	WO1-4700
Ohio	Ohio Instrument Co. ..... 7310 Winston Churchill Dr, Dayton 23	CH4-2744
Wash	Industrial Representation Co. ..... 20215 Beach Dr, Redmond	TW-5000
Per	Terminal Radio International Ltd. 240 W 17th St, New York 11	CH5-4800
	GENERAL ASTROMETALS CORP. 220 Yonkers Ave., Yonkers 2, NY	YO6-2211
Cal	International Aviation Services ..... 6401 Sepulveda Blvd, Los Angeles 45	CH4-7373
	GENERAL ATOMIC DIV. GEN. DYNAMICS CORP. Box 608, San Diego 12, Cal	GLA-2220
DC	General Atomic Div./Gen Dynamics ..... 1710 H St, Washington	NO7-5131
NY	General Atomic Div./Gen Dynamics ..... 1 Rockefeller Plaza, New York 20	CI5-8000
	GENERAL AUTOMATIC CORP. ..... 171-23rd St, Baton City, NJ	BA6-1017

GENERAL CONTROLS CO. ..... 801 Allen Ave. Glendale 1, Cal VO-2181
Ariz General Controls Co. ..... 5115 N 7th St. Phoenix CR1-1660
Colo General Controls Co. ..... 2323 W 2nd Ave. Denver PE3-4684
Ga General Controls Co. ..... 1470 Spring St. NW, Atlanta 9 ..... TR6-4419
Ill General Controls Co. ..... 6600 McCormick Blvd. Skokie HO-2200
Kan General Controls Co. ..... 1205 N Main, Wichita 2 ..... AM7-1040
NY General Controls Co. ..... 566 E 42nd St. New York 17 ..... GR6-0806
Ohio General Controls Co. ..... 4817 Chester Ave. Cleveland 3 ..... EX3-0585
Pl General Controls Co. Power Eng. Div. Warwick Ind. Park, Warwick ST1-4741
Tex General Controls Co. ..... 1204 N Industrial Blvd. Dallas RI-8401
Wash General Controls Co. ..... 905 Westlake Ave. N, Seattle AT6-0460

GENERAL DYNAMICS/ASTRONAUTICS
Box 1128, San Diego 12, Cal

GENERAL DYNAMICS/CONVAIR Box 2672 San Diego 12, Cal CY6-6011
Ala General Dynamics ..... 5 Memorial Pkwy. Huntsville 536-3672
Colo General Dynamics ..... 1400-A N Hancock Ave. Colorado Springs MI4-4484
DC General Dynamics ..... 1710 "H" St. NW, Washington 6 ..... ME7-5151
Mass General Dynamics ..... 402 Massachusetts Ave. Lexington 73 ..... VO3-7550
Neb General Dynamics ..... Fontenelle at 30th St. Omaha 37 ..... AT2230
Ohio General Dynamics ..... 204 N Wilkinson Ave. Dayton 2 ..... BA3-4871
Tex General Dynamics ..... 816 S St. Mary's St. San Antonio 5 ..... CA5-5218

GENERAL DYNAMICS/ELECTRONICS
100 Carlton Rd. Rochester 3, NY

Cal General Dynamics/Electronics ..... 2201 S Barrington Ave. Los Angeles 64 ..... GR6-0221
Colo General Dynamics/Electronics ..... 421 N Tejon St. Colorado Springs MI4-1107
DC General Dynamics/Electronics ..... 1776 Eye St. Washington ME7-1111
Fla General Dynamics/Electronics ..... 122 E Colonial Dr. Orlando CH1-5450
Mass General Dynamics/Electronics ..... 402 Massachusetts Ave. Lexington 73 ..... VO3-5000
Mich General Dynamics/Electronics ..... 1400 E Lincoln Rd. Birmingham MI4-9004
NJ General Dynamics/Electronics ..... 25 Rockliffe Pl. Red Bank SU1-7004
NY General Dynamics/Electronics ..... 1020 E Dominick St. Rome FR6-7460
Ohio General Dynamics/Electronics ..... 340 W 1st St. Dayton 2 ..... BA3-9401
Tex General Dynamics/Electronics ..... 5841 Ferrington St. Dallas RD-8110

GENERAL DYNAMICS/FORT WORTH
Box 748, Fort Worth 1, Tex FE8-7211

GENERAL DYNAMICS/POMONA Box 1011, Pomona, Cal MA9-5771
Ala General Dynamics/Pomona ..... 5 Memorial Pkwy. Huntsville 536-3672
Colo General Dynamics/Pomona ..... 1400-A-N Hancock Ave. Colorado Springs MI4-4484
DC General Dynamics/Pomona ..... 1710 "H" St. NW, Washington 6 ..... ME7-5151
Mass General Dynamics/Pomona ..... 402 Massachusetts Ave. Lexington 73 ..... VO3-7550
Neb General Dynamics/Pomona ..... 804 S 10th St. Omaha 2 ..... AT2230
Ohio General Dynamics/Pomona ..... 204 N Wilkinson St. Dayton 2 ..... BA3-4871
Tex General Dynamics/Pomona ..... 816 S St. Mary's St. San Antonio 5 ..... CA5-5218
Swit General Dynamics/Pomona ..... Geneva GE26-10-06

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(Representing many General Electric product departments.)

Ala GE Apparatus Sales Off. ..... 2161 Highland Ave. Birmingham 5 ..... FA3-1988
Cal GE Apparatus Sales Off. ..... 515 N Vigare St. Los Angeles 54 ..... MA5-7081
Cal GE Apparatus Sales Off. ..... 985 Montgomery St. San Francisco 4 ..... DO2-0760
Colo GE Apparatus Sales Off. ..... 201 University Blvd. Denver 6 ..... DU8-4461
DC GE Apparatus Sales Off. ..... 777 14th St. NW, Washington 5 ..... EX3-3000
Fla GE Apparatus Sales Off. ..... 55 NE 2nd Ave. Miami 32 ..... FR9-6681
Ga GE Apparatus Sales Off. ..... 1000 Peachtree Rd. NW, Atlanta 5 ..... TR6-0481
Ill GE Apparatus Sales Off. ..... 840 S Canal St. Chicago 66 ..... WA5-6811
Ky GE Apparatus Sales Off. ..... 3800 Meadow Dr. Louisville 18 ..... EM4-0804
La GE Apparatus Sales Off. ..... 607 Gravier St. New Orleans 12 ..... TU7231
Md GE Apparatus Sales Off. ..... 111 Park Ave. Baltimore 1 ..... MU5-5660
Mass GE Apparatus Sales Off. ..... 31 St. James Ave. Boston 10 ..... HU5-1300
Mich GE Apparatus Sales Off. ..... 700 Antoinette St. Detroit 2 ..... TR5-0880
Minn GE Apparatus Sales Off. ..... 15 S 6th St. Minneapolis 2 ..... FR8-0772
Mo GE Apparatus Sales Off. ..... 659 Olive St. St Louis 1 ..... GE6-4340
NY GE Apparatus Sales Off. ..... 570 Lexington Ave. New York 22 ..... PL3-1211
NY GE Apparatus Sales Off. ..... 1000 James St. Syracuse 6 ..... HO3-5611
NC GE Apparatus Sales Off. ..... 132 S Tryon St. Charlotte 1 ..... FR6-5572
Ohio GE Apparatus Sales Off. ..... 4966 Woodland Ave. Cleveland 4 ..... EU1-4400
Pa GE Apparatus Sales Off. ..... 2 Penn Center Plaza, Philadelphia 2 ..... LO5-1880
Pa GE Apparatus Sales Off. ..... Oliver Bldg. Mellon Sq. Pittsburgh 22 ..... AT1-0400
Tex GE Apparatus Sales Off. ..... 315 N Ramon, El Paso 5-7600
Wash GE Apparatus Sales Off. ..... 710 2nd Ave. Seattle 4 ..... MA4-6300

GENERAL ELECTRIC CO. COMMER. PRODS. DEPT. Lynchburg, Va VA-7211
Sales offices in all principal cities

GENERAL ELECTRIC CO. PRIMARY DEPT. 1 River Rd. Schenectady 5, NY FR4211

GENERAL ELECTRIC CO.
IND. HEATING DEPT. ..... 1 Progress Rd. Bellefonte, Ind EM8-4471

GENERAL ELECTRIC CO. LAMINATED PRODS. DEPT. Coshocton, Ohio HA3-4310
Ariz General Electric Co. ..... 3600 N Central Ave. Phoenix AM4-5956
Ill General Electric Co. ..... 840 S Canal St. Chicago WA5-6811
Ind General Electric Co. ..... 1500 Stadium Dr. Indianapolis ME4-3440
Mass General Electric Co. ..... 146 N Broom St. Boston AL4-0050
Mich General Electric Co. ..... 21800 Greenfield Rd. Oak Park LU8-8005
Minn General Electric Co. ..... 2524 Nicollet Ave. Minneapolis 3 ..... FE7-3850
NJ General Electric Co. ..... 55 Jacobsen St. Belleville PL1-2800
NY General Electric Co. ..... 1 River Rd. Schenectady FR4-2211
NY General Electric Co. ..... 3533 James St. Syracuse HO3-5611
NC General Electric Co. ..... 1064 Pembroke Rd. Greensboro BR3-4081
Ohio General Electric Co. ..... 6900 Pearl Rd. Cleveland 30 ..... VI3-1900
Pa General Electric Co. ..... 1050 State Rd. Drexel Hill CL9-5131

GENERAL ELECTRIC CO., LAMP METALS & COMPONENTS DEPT. ..... 21800 Tungsten Rd. Cleveland 17, Ohio KE1-4000
Cal J. W. Forbes Co. ..... 940 1st St. Los Altos WH5-3400
Ill General Electric Co. ..... 4501 S Pulaski Rd. Chicago 30 ..... CL4-6181
Ill General Electric Co. ..... 100 Arcadia Ave. Providence 5 ..... GA1-1810

GENERAL ELECTRIC CO. METALLURGICAL PRODS DEPT.
SPECIALTY ALLOYS SECT. 11127 E 8 Mile Rd. Detroit 32, Mich JE4-9700

GENERAL ELECTRIC CO.
MINIATURE LAMP DEPT. ..... Nela Park, Cleveland 12, Ohio ELI-4000
Cal E. E. Coleman ..... 2747 S Main Ave. Los Angeles 33 ..... RA3-3541
Ga E. E. Lewis ..... 301 E Paces Ferry Rd. NE. Atlanta 5 ..... CE7-0705
Ill R. M. Pearce ..... 105 N Canal St. Chicago 6 ..... DE0-4722
Mich J. W. Fletcher ..... 600 Fisher Bldg. Detroit 2 ..... TR6-1660
Mo L. O. Reed ..... 300 E 10th Ave. N Kansas City 16 ..... GR1-3040
NY E. C. O'Hara ..... 570 Lexington Ave. New York 22 ..... PL1-1211
Ohio C. T. Hesse ..... 900 Nassau St. Cincinnati 6 ..... PL1-8411
Pa R. L. Seary ..... Rt. 252 at Rapey, King of Prussia MU5-5900

GENERAL ELECTRIC CO. RECEIVING TUBE DIV. Owensboro, Ky HO3-2691
Cal General Electric Co. ..... 11840 W Olympic Blvd. LA GR-7705
Cal General Electric Co. ..... 701 Welch Rd. Palo Alto DA1-8771
DC General Electric Co. ..... 777 14 St. NW, Washington EX3-6090
Fla General Electric Co. ..... 104 E Gore Ave. Orlando GA4-0530
Ill General Electric Co. ..... 2800 N Milwaukee Ave. Chicago SP7-1600
Mass General Electric Co. ..... 701 Washington St. Newtonville WO3-0400
Mich General Electric Co. ..... 17225 W 8 Mile Rd. Southfield EE4-6100
Minn General Electric Co. ..... 2800 Gorham Ave. 4. Minneapolis WE3-4821
NJ General Electric Co. ..... 300 Main Ave. Clifton GE8-0097
Ohio General Electric Co. ..... 110 W 1st St. Dayton BA3-7161
Tex General Electric Co. ..... 2800 Maple Ave. Dallas ST-4504

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GENERAL ELECTROSTATICS CORP. 4438 Forest Ln. Garland, Tex RE6-7161

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(RADCLIFFE) LTD. ..... Bury Rd. Radcliffe Nr. Lancs, Eng RA2291
Aust Hancock Brabrugh Pty. Ltd. ..... 517-519 Little Collins St. Melbourne MU7284
Can H. J. S. Court ..... Box 888, Georgetown, Ontario TR7-4694
Eng General Engineering Co. ..... 8 Lambeth Rd. London S. E. 1 ..... WAB848
Eng General Engineering Co. ..... 209 Stratford Rd. Shirley Solihull Warwickshire HIA808
Fr P. Meyer ..... 15 Rue Marsal, Paris 10 ..... TA4074
Ger Kameral Abteilung ..... Donnagasse 30, Graubung C. Sweden 197116
Indl L. Bryson ..... Mercantilian 99-100, Amsterdam N 62222
Ind Ampere S.A.S. ..... Via Polina Canal 18, Milan 1800883
S.Af G. H. Langler & Co. Ltd. ..... 240 Main St. Johannesburg 23-6462

GENERAL KINETICS CORP. ..... 197 S Van Brunt St. Englewood, NJ LO5-3000
Ala Control Equipment Co. ..... Box 6944, Birmingham 9 ..... TH9-0211
Cal Lancombe Engineering Co. ..... 120 N B St. San Mateo DU2-7027
Ga Control Equipment Co. ..... Box 601, Washington CH9-0130
Ga Control Equipment Co. ..... Box 11786, Atlanta 5 ..... CE7-1680
Ill Chi Power & Process Equip. ..... 6770 Northwest Hwy. Chicago 31 ..... RO9-0710
Mich Garrett Burgess, Inc. ..... 4600 Oakman Blvd. Detroit 4 ..... TX4-0770
Mo Kansas City Equipment Co. ..... 4700 Holly St. Kansas City 12 ..... PL3-0727
NJ Fluid Controls Co. Inc. ..... 840 Anderson Ave. Cliffside Pk. WH9-1790
Ohio The Abbott Co. ..... 3487 Michigan Ave. Cincinnati EA1-2040
Ore R. E. Donelson Co. ..... Box 6795, Portland 22 ..... OL4-1020
Pa Annovis, Inc. ..... Box 11068, Pittsburgh 37 ..... WO1-4420
Va Fluid Controls Co. Inc. ..... 1021 Wilson Blvd. Arlington 1 ..... JA5-0383

GENERAL MAGNETICS, INC. .. 135 Bloomfield Ave. Bloomfield, NJ PI8-3400

GENERAL MEASUREMENTS .. 22 Railroad Ave. Concordia, NY RA8-0320
For Sales Offices see Intro-Amatic, Inc.

GENERAL METAL PRODUCTS CO.
Centre & Glendale, Easton, Pa BL8-0000
NJ J. Kear ..... 640 Park Ave. Toms River DE9-0504
Pa R. Kear ..... 660 W 3rd St. Bethlehem OW6-1384

GENERAL METERS, INC. ..... Box 1795, Grand Junction, Colo CH2-9900
Cal Duncan-Fischer & Associates, Inc. ..... 7000 Melrose Ave. Los Angeles 46 ..... OL1-4300
Cal Peninsula Associates ..... 1540 Hancock St. Redwood City EM5-8141
Colo Dynamic Measurements, Inc. ..... 1555 S Bannock St. Denver 23 ..... PE5-5761
Ill J. I. Inden Sales Co. ..... 5117 N Damen, Chicago LO7-5884
Mo Automatic Control Electronic Sales ..... 4600-B Trent Ave. Kansas City 10 ..... DE3-0504
NJ J. L. Netter Associates ..... 172 Walker Ln. Englewood LO7-4010
NC The Combs Co. ..... 2000 Beach St. Winston-Salem PA5-1408
Ohio Dave & Steffen, Inc. ..... 1206 Euclid Ave. Cleveland 15 ..... TO1-0884
Wash Wildwood Co. ..... 222 1st Ave. N, Seattle 9 ..... AT4-3080
Aust The Foxbrush Corp. ..... 67 Broad St. New York 4, NY WH9-4040
Can E. S. Gould Sales Co. Ltd. ..... 19 Le Royer St. West Montreal 1, Que AV8-8225

GENERAL MILLS INC. ELECTRONIC GE. AUTOMATIC HANDLING EQUIP. DEPT.
400 N 5th St. Minneapolis 1, Minn

GENERAL NUCLEAR CORP. ... 7300 S. Cypress Ave. Fullerton, Cal LA1-6254

GENERAL NUCLEAR CORP. .. 555-4 5th Ave. New York 36, NY PL3-3850
DC Nuclear Supply & Service Co. ... 402 Washington Bldg. Washington 5 ..... ST3-5400

GENERAL NUCLEAR ENGINEERING CORP.
Box 242, Boca Raton, Fla PO-2151

GENERAL RADIO CO. ..... West Concord, Mass EM8-4400
Cal General Radio Co. ..... 1000 N Seward St. Los Angeles HO9-0201
Cal General Radio Co. ..... 1100 Los Altos Ave. Los Altos WH8-0200
Ill General Radio Co. ..... 6501 W North Ave. Oak Park VI8-0400
Md General Radio Co. ..... 8055 13th St. Silver Spring JU5-1000
NJ General Radio Co. ..... Broad Ave. at Linden, Ridgefield WH9-5340
NY General Radio Co. ..... 5 Molloy Rd. Syracuse 11
Pa General Radio Co. ..... 1150 York Rd. Abington HA4-7419
Can General Radio Co. ..... 99 Floral Pkwy. Toronto, Ont CH6-2171

GENERAL REGULATOR CORP. 466 Fifth Ave. New York 18, NY JU2-4400
For Sales Offices see Power Wheels Corp.

GENERAL RESISTANCE INC. .. 450 Southern Blvd. New York 55, NY CY3-1800
Pa W. Rex Wimbody ..... 801 S Fort Hunton, Clearwater 440-7972
Minn D. D. Ross Co. ..... 811 Washington St. Brighton STS-4130
Mich Engineers & Equipment Co. ..... 13005 James Connors Hwy. Detroit BR1-0040
Mo Design & Sales Engineering Co. ..... 1010 Forsyth Blvd. St. Louis PA1-0400
NJ Sunday-O'Brien ..... 15 Pecor St. Haddonfield HA5-4013
NY J. A. Reagan Co. Inc. ..... 46 N Lake Ave. Albany 3 ..... HE8-0940
NY QRD Electronic Sales Inc. ..... 5 Elm Ave. Mt. Vernon MO8-2300
Ohio Components Engineering Co. ..... 7401 N Linden Ln. Cleveland 24 ..... VE0-0707
Pa Ad Auxiliaries Inc. ..... 26 Broad St. New York 4 ..... BO9-7750

GENERAL SCIENTIFIC
EQUIPMENT CO. ..... Limekiln & Williams, Philadelphia 38, Pa

GENERAL THERMOELECTRIC CORP. Princeton, NJ DA5-4545
Cal J. Saunders ..... 3141 W Century Blvd. Inglewood OR6-3680
Fla CCE-Orl-CCL, Inc. ..... 2722 Precision Dr. Orlando CH3-1801
Ill Spencer Engineering ..... 4804 Osborn St. Skokie OR4-3000
Nev R. L. Farnsworth ..... 2400 Isabella Ave. Las Vegas DU3-4020
NY R. F. Foster ..... 104 Southfield Dr. Fayetteville HU1-0157
NY Young Associates ..... 307 Monroe Ave. Rochester 19 ..... HU-3150
Ohio Martin-Scriges, Inc. ..... 13005 Shaker Blvd. Cleveland 20 ..... SW1-0707
Pa Rodenhiser & Co. ..... 20 Cricket Ave. Ardmore MI9-0011

GENERAL VACUUM CORP. ... 91 Hicks Ave. Medford, Mass EX3-4100
Cal L. Patrick Assoc. ..... 1107 S Fremont Ave. Alhambra CU8-0271
Conn W. H. K. Duff & Co. ..... P. O. Box 488, Avon OR7-0171
Ohio L. H. Waldrip Co. ..... 3180 Euclid Ave. Cleveland 15 ..... EX1-4242
Pa Paul & Welp ..... 1400 Suburban Sta. Bldg. Philadelphia 2 ..... LO6-1277

GERBER SCIENTIFIC INSTRUMENT CO. Box 302, Hartford, Conn BU9-2721
Cal Gerber Scientific Instrument Co. ..... 655 E Walnut, Pasadena MU7-5746
DC Gerber Scientific Instrument Co. ..... 1400 "G" St. NW, Washington 5 ..... ME7-0660
Can Electromechanical Products ..... Markham Rd. Agincourt, Ont AX8-5011

GILBERT ASSOCIATES, INC. .. 520 Lancaster Ave. Reading, Pa FR6-3971
DC Gilbert Associates, Inc. ..... 1211 K St. NW, Washington 5 ..... ME7-8150
NY Gilbert Associates, Inc. ..... 61 Broadway, New York 6 ..... WH9-7030

GILLILAND INSTRUMENT CO. INC.
Box 7040, Oakland 1, Cal EM4-1118
DC Emery Herzinsky ..... 7204 Arrowood Rd. Bethesda 14, Md EM5-2951

GITS BROS. MFG. CO. ..... 1840 S Kilbourn Ave. Chicago 23, Ill LA1-2554
Cal Gano Sales ..... 3300 McLaughlin Ave. Los Angeles 66 ..... GM-1177
NJ L. Hanson ..... Rutherford WE8-4344

GLIDDEN CO. ..... 900 Union Commerce Bldg. Cleveland 14, Ohio PE1-2121
Cal The Glidden Co. ..... 1000 10th St. San Francisco 7 ..... UN3-4130
Ga The Glidden Co. ..... 1003 Glidden St. Atlanta 10 ..... SW6-1551
Ill Glidden Co. ..... 1800 S Normal Ave. Chicago 16 ..... CA5-8500
Ill Glidden Co. ..... 1800 N LeClaire Ave. Chicago 39 ..... BE7-6100
La The Glidden Co. ..... 604 Josephine St. New Orleans 13 ..... MA3900
Minn The Glidden Co. ..... 1901 E Hennepin Ave. Minneapolis 13 ..... FE1-8001
Mo Glidden Co. ..... 100 Gerard St. St. Louis 3 ..... GA1-5000
Ohio Glidden Co. ..... 13301 Madison Ave. Cleveland 1 ..... WO1-8000
Pa The Glidden Co. ..... 3rd & Bern St. Reading FR3-4111
Can Glidden Co. ..... 355 Wallace Ave. Toronto 3, Ont.
Can The Glidden Co. ..... 130 Elmslie St. LaSalle, Quebec DO8-8400

GOOD-ALL ELECTRIC MFG. CO. 722 W Pearl St. Ogallala, Neb 20 6-3011
Cal Good-All Electric Mfg. Co. ..... 5400 Fallbrook Ave. Canoga Park TR8-4700
Ill Monac Sales Co. ..... 4740 N Austin, Chicago 30 ..... KE8-1020
Ind R. O. Whitnell & Assoc. ..... 4600 E Washington, Indianapolis 1 ..... FL9-6376
Ala Dear Associates, Inc. ..... Box 487, Bedford, Mass CM4-7200
Mo E. B. Schwartz Co. ..... 4810 Main St. Kansas City WE1-7024
NY L. D. Allen, Inc. ..... Box 32, Dallas Sta. Syracuse 5 ..... GE2-6300
NY P. D. Assoc ..... Port Washington Blvd. Port Washington POY-0420
Ohio R. A. Whitnell & Assoc. ..... 5200 Far Hills Bldg. Dayton 19 ..... AX3-4001
Pa Brown - Frederick & Assoc. Inc. ..... 301 S Easton Rd. Glenside TU7-1900
Tex E. P. Aymond Co. ..... 3015 Lemmon Ave. Dallas LA5-4300
Va Potomac Electronics, Inc. ..... 604 Montgomery St. Alexandria OR6-1020
Wis E. A. Stickney & Assoc. ..... 4317 N Greenbay Ave. Milwaukee CO4-1020

GOODMOUGH PUMPS LTD .... 172 Jamaica St. London E1, Eng TRO6/5
Eng Tudor Works ..... Bradgate St. Leicester LE21612
Eng Goodmough Pumps Ltd. ..... Chorlton St. Cheetham, Man BL8010

GOODMANS INDUSTRIES LTD. ..... Axiom Wks. Neasden, Middx. Eng WEM1200
NY Brother Corp. ..... 630 Halstead Ave. Mamaroneck OW3-1900
Can Wickens Instrument & Supply Ltd. 10 Floral Pkwy. Toronto, Ont
Fr Sonelle & Cie. ..... Rue Penelonne 17, Paris 10e
Ger Siemens Elektrik G.m.b.H. ..... Seyestrasse 15, Munich 15
Swed Svenska A.B. Philips ..... Gustagatan 10, Stockholm 6 ..... 24 16 00

GORDON CO. CLAUD S. ..... 659 W 39 St. Chicago 16, Ill VI3-6820
Cal Pacific Scientific Co. ..... 6800 Chalet Dr. Los Angeles LO3-1321
Ind C. S. Gordon Co. ..... 2000 E 38th St. Indianapolis 5 ..... LF-3687
Kan Sullivan-Moore Co. ..... 807 1/2 Lasalle, Wichita FO3-8434
Mich C. S. Gordon Co. ..... 5840 E Grand Blvd. Detroit 11 ..... TR3-1391
Mo Fillo Sales & Engrg. Co. ..... 4600 Chestnut St. St. Louis 10 ..... JE1-0477
NY C. A. Gass Co. ..... Box 304, New Rochelle NE2-1400
Ohio R. E. Sarkamp Co. ..... Box 94, Cincinnati 16 ..... TW1-1500
Ohio C. S. Gordon Co. ..... 1000 Hamilton Ave. Cleveland 14 ..... TO1-6071
Pa C. S. Gordon Co. ..... 119 Penn Ave. Pittsburgh 22 ..... PE1-0900
Pa Process Equip. Sales Co. ..... 327 Woodlake Ave. Narberth
Tex Gay Sales Co. Inc. ..... 419 3rd Ave. Houston JA9-0479
Wis C. S. Gordon Co. ..... 647 W Virginia St. Milwaukee 4 ..... BR1-1271

GOULD CO., JOHN D. ..... 4700 Mass. Ave. Indpls 18, Ind.

GOURICK RESPONSES CO. LTD. 92 Ave St. Pat Glasgow, Scot PG4181
Can Gourick Brighton, Ltd. ..... 120 St. Peter St. Montreal 1 ..... VU3-0017
Eng The Gourick Responses Co. Ltd. 20 Southside St. Plymouth PLY-6341

TERR	MANUFACTURERS SALES/OR REPRESENTATIVES OFFICES	TEL. NO.
Eng	The Gosnell Supreveh Co. Ltd. Union Quay, N Shields	NO394
Eng	The Gosnell Supreveh Co. Ltd. Rotary Green Rd. Lowestoft	LO322
Eng	The Gosnell Supreveh Co. Ltd. 79 New Bond St. London	MAY207
Eng	The Gosnell Supreveh Co. Ltd. 69/70 Old Hall St. Liverpool	CE3411
Eng	The Gosnell Supreveh Co. Ltd. 86 Great Hampton St. Birmingham	NOB977
Eng	The Gosnell Supreveh Co. Ltd. Wyse Dock, Plymouth	PL3451
Eng	The Gosnell Supreveh Co. Ltd. W Dock Ave. Hull	CE3-7071
Scot	The Gosnell Supreveh Co. Ltd. 35 St. Clemens St. Aberdeen	AB2-1040
Scot	The Gosnell Supreveh Co. Ltd. 86 St. Vincent St. Glasgow	CE3040
Wls	The Gosnell Supreveh Co. Ltd. 19 James St. Cardiff	CAR-0005
	GIFF-MAC INSTRUMENT CO. 180 Kings Rd. Hackensack, NJ	FE7-3400
	GRACE & CO. W.R., DAVISON CHEMICAL DIV. Box 700, Pompton Plains, NJ	TE5-3900
	GRACE & CO., W.R., DAVISON CHEMICAL DIV. Erwin, Tenn	SA7-3900
Cal	W. R. Grace & Co. 8040 Remede Blvd. Huntington	BE3-2270
DC	W. R. Grace & Co. 1511 K St. Washington	NF7-0840
Md	W. R. Grace & Co. 101 N Charles St. Baltimore	SA7-0000
NJ	W. R. Grace & Co. Box 498, Pompton Plains	TE5-3900
	GRAHAM MFG. CO., INC. 170 Great Neck Rd. Great Neck, NY	
Cal	Graham Mfg. Co. Inc. 888 10th St. Oakland 12	
Cal	Hamill Co. 8040 Beverly Blvd. Los Angeles 48	
Ill	Graham-Rich & Co. 407 S Dearborn St. Chicago 5	HA1-0944
Mass	Adkins & Lawrence 84 Summer St. Natick	OL3-0402
Mich	Precon Controls Co. 12391 Mendenon Rd. Livonia	
Mo	Lumpin Bros. 3910 Big Bend Blvd. St. Louis	
NY	R. E. Walther 1021 Clinton St. Buffalo	
Ohio	W. M. Wilson Co. 6001 Pearl Rd. Strongsville 36	
Ohio	Jenkins Equipment Co. 6 Deerhill Ln. Cincinnati	
Pa	P. Turner Co. Box 32, Dale-Conway	
Tex	The Raingo Co. 5003 Morsey, Houston	
Can	Graham Mfg. (Canada), Ltd. 159 Bay St. Toronto 1, Ont	
	GRAME TRANSFORMER, INC. Service & Beach Tree Sts. Grand Haven, Mich	HE-3420
Ark	W. T. Blackburn Associates P.O. Box 18975, Dallas 30, Tex	FL1-0980
Ind	The Willard Spencer Co. 10544 Livernois, Detroit 21, Mich	UN8-0100
Ky	The Willard Spencer Co. 10544 Livernois, Detroit 21, Mich	UN8-0100
Mich	The Willard Spencer Co. 10544 Livernois, Detroit 21	UN8-0100
NJ	T. E. Stewart Co. Broadway & Dillon Ave. Maple Shade	HO8-2430
NY	E. Schwartzman 135 Quincy Blvd. New Hyde Park	HU8-4001
NY	Gulmen Sales, Inc. 18 St. Paul St. Rochester 4	LO8003
Ohio	The Willard Spencer Co. 10544 Livernois, Detroit 21, Mich	UN8-0100
Okla	W. T. Blackburn Associates P.O. Box 18975, Dallas 30, Tex	FL1-0980
Pa	T. E. Stewart Co. Broadway & Dillon Ave. Maple Shade, NJ	HO8-2430
Tex	W. T. Blackburn Associates P.O. Box 18975, Dallas 30	FL1-0980
	GRAVER TANK & MFG. CO. DIV. UNION TANK CAR CO. 30 E Washington St. Chicago 1, Ill	
Cal	Graver Tank & Mfg. Co. 1335 W Huntington Dr. Arcadia	HU8-4734
Cal	Graver Tank & Mfg. Co. 155 Montgomery St. San Francisco 4	GA1-0940
Colo	Hallmann Electronics 490 S Navajo, Denver	SU9-5552
La	Graver Tank & Mfg. Co. 2302 Richards Bldg. New Orleans 12	MA5840
Mich	Graver Tank & Mfg. Co. 9001 W Grand Blvd. Detroit 9	TR6-0900
NY	Graver Tank & Mfg. Co. 404 Madison Ave. New York 17	MU8-0181
Ohio	Graver Tank & Mfg. Co. 2000 Euclid Ave. Cleveland 15	EX1-0800
Ohio	Graver Tank & Mfg. Co. Box 4761, Tulsa 9	HY7-1300
Pa	Graver Tank & Mfg. Co. The Bowers, Jeddonover	TI7-111
Tex	Graver Tank & Mfg. Co. 1040 McCormick Ave. Houston 1	WA6-1701
Utah	Graver Tank & Mfg. Co. Box 478, Salt Lake City 10	DA8-0841
	GRAVER WATER CONDITIONING CO. 216 W 14th St. New York 11, NY	WA4-2271
Cal	M. S. Peach Co. 420 Market St. San Francisco 11	YU8-5465
Cal	Dawson Engineering Co. 4000 Buckingham Rd. Los Angeles	AX5-4421
Colo	G. M. Wallace & Co. 324 Denham Bldg. Denver 2	
Ga	E. L. Huff & Associates 3030 Maple Dr. NE, Atlanta 5	CE7-0215
Ill	Graver Water Conditioning Co. 332 S LaSalle St. Chicago 1	CE6-4700
Mass	Farrell & Jones 10 High St. Boston	HA6-1710
Mich	Mowel Co. 7543 E Davison, Detroit 12	EU5-1770
Ohio	Graver Water Conditioning Co. 320 Citizens Bldg. Cleveland 14	TO1-0400
Ore	R. H. Brown & Co. 610 Stump Bldg. Portland 4	CA7-1156
Pa	R. H. Schenker Co. 1022 Commercial Trust Bldg. Phila 2	LO8-0811
Tex	Dawson Engineering Co. 4810 Beech St. Bellaire	MO9-1000
Utah	G. M. Wallace & Co. Continental Bank Bldg. Salt Lake City	
	GRAY TOOL CO. 7300 Ardmore, Box 2291, Houston 1, Tex	HU7-1240
Cal	W. R. McNew 2711 Bowman St. San Francisco 7	
Ga	Gamer Parker & Assoc. Box 17978, Atlanta 5	
La	McCants, Dunn & Assoc. Box 12044, New Orleans 25	
Ohio	W. G. Hayden Co. Box 5024, Cleveland 7	
Ohio	James E. Dyer Co. Box 5284, Tulsa 1	
Pa	Consolidated Co. 343 Mt. Lebanon Blvd. Pittsburg 34	
Tex	G. Weaver 7027 Maxwell Ln. Dallas 30	
Can	G. G. Oil Field Services, Ltd. Edmonton, Alberta	GE9-0180
Eng	Hamm & Hunsley, Ltd. Lincoln	
	GREAT LAKES CARBON CORP. 18 E 48th St. New York, NY	PL5-4800
Ala	J. D. Hayes Co. 205 S 32nd St. Birmingham	FA3-0627
Cal	Great Lakes Carbon Corp. 671 F Oak Grove Ave. Menlo Park	DA3-4322
Cal	G. O. O'Hara 4400 California St. Long Beach	GA4-0003
Ill	Great Lakes Carbon Corp. 1515 N Harlem Ave. Oak Park	VI8-0800
Mich	P. B. Tanire 20051 Kenilleard St. Farmington	GR8-0420
Mo	D. J. Palmisano 1000 W 10th St. Kansas City	WI2-9740
NY	Great Lakes Carbon Corp. The Hunrich Bldg. Niagara Falls	RU5-1220
Pa	Great Lakes Carbon Corp. 300 Cedar Blvd. Pittsburgh 30	LO3-1180
Tex	P. E. Manley 4002 Sunset St. Bellaire	MU9-2271

TERR	MANUFACTURERS SALES/OR REPRESENTATIVES OFFICES	TEL. NO.
Ind	Engineering Products Co. 6020 E Washington St. Indianapolis 19	FL9-5374
Mass	Tumon Appliance Co. 501 Tremont St. Cambridge 39	EN4-5700
Mich	J. W. Bakkin Co. 12000 Capitol Ave. Oak Park, Detroit 1	JO5-1661
Mo	Hess-Brownell, Inc. 8000 Olive St. St. Louis	JE1-1333
NY	R. L. Peter & Associates 1540 Broad St. Bloomfield, NJ	ED6-0000
NY	Davies Inst. Services, Inc. 3033 Harlem Rd. Buffalo 26	CE2700
Ohio	Cleveland Inst. Equip. Sales Co. 4000 Euclid Rd. Cleveland	HE1-0540
Pa	P. F. Sohns 429 Twickenham Rd. Glenside	TU6-5550
Tex	Wright Industrial Products 2700 N Central Expwy. Dallas	TA6-5571
	GRISCOM-RUSSELL CO. Massillon, Ohio	HO-8751
Cal	F. E. Welch 65 Montgomery St. San Francisco 6	YU5-0000
Cal	Griscom-Russell 5270 Colorado Blvd. Los Angeles 42	CL6-5500
Colo	Stearns-Roger Mfg. Co. 600 Bannock St. Denver 4	AC3-8484
Fla	T. C. Heyward & Co. 800 W Adams St. Jacksonville 9	EL6-2021
Ga	T. C. Heyward & Co. 3000 Peachtree Rd. NE, Atlanta 5	EM5-4000
Ill	Griscom-Russell 50 W Calendar Ave. LaGrange	FL5-0204
Mich	T. C. Smith & Co. 400 Pierce St. Birmingham	MI6-8404
NY	Griscom-Russell 555 Madison Ave. New York 17	LD5-3451
NC	Heyward, T.C., & Co. Box 3006, Charlotte 3	FR7-3870
Pa	Griscom-Russell 1317 Land Title Bldg. Philadelphia 10	LO8-1880
Tex	The Griscom-Russell Co. 1100 E Holcombe Blvd. Houston 35	JE3-7405
Wash	Hammond-Westland Co. 3411 4th Ave. Seattle 1	MA3-4015
	GUIDANCE CONTROLS, INC. Hicksville, NY	WE5-0980
Cal	C. J. Thompson 307 N Harrington Dr. Fullerton	LA5-8400
Ill	R. I. Kennedy Co. 6710 N Olphant, Chicago 31	WE3-0727
Md	A. Sandusky 10 Riverside Dr. Annapolis	CO7-7322
Minn	Schuman-Young Co. 5 Oker St. Beverly	WA5-0131
Minn	P. D. Hill Co. 6110 Excelsior Blvd. Minneapolis 16	WE9-6727
NY	Oum Sales Corp. 80 Shore Rd. Port Washington	PO7-7700
NY	Electronic Service Lab. Oval Rd. Geneva Falls	LO6-0000
Ohio	Hexco Associates 33 W Stratford Ave. Dayton 9	BA5-0011
Pa	Aqua Industries, Inc. Box 52, Warminster	OS5-4121
Utah	J. Pasley 21 Kensington Ave. Salt Lake City	HY1-0871
Can	Electrodynge Ltd. 5154 St. Lawrence Blvd. Montreal	DU9-5314
	GUTBROD-MASCHINENFABRIK STEINBRAUNE AG Lippstadt 1, Oberkassen Bldg., Ger	40141
NY	The Pneum Corp. 80 Broad St. New York 4	WHD-4841
Aus	Gebruder Grob Wien 1, Kaunitzstr. 11	0A-15-35
Belg	Salmont 38 Pl. de Vingt Aout, Lentich	LU32771
Can	Transmonn Machine Co., Inc. 2007 Dunbar Ave. Montreal 16, PQ	HE9-8814
Eng	Delbery & Palmer Ltd. 84, Victoria St. London S.W. 1	VIC3404
Fr	Sem. Soc. d'Entreprises et de Material Ind. 46 Rue de la Faisanderie, Paris 16e	KLB-46
Ind	Lamen & Tosseo Ltd. Box 2176, Bombay 1	25 44 1 1
Ind	K. Lange Via Carlesto 5, Mailand	MA088 274
Neth	Bello N.V. Postbus 275, Den Haag	180170-72
Nor	Lippestad A/S.G. von der Lippe Postboks 7094, Oslo	464802
Swed	A. Johnson & Co. P.O.B. 7197, Stockholm 7	201600
Swtz	Industrielen AG Ottmarstr. 8, Zurich 8	051 342200
	GYRA ELECTRONICS CORP. Box 184, La Grange, Ill	FL4-4444
Ala	F. O. Wamble 3007 Harwood Dr. Montgomery	
Ill	D. E. Smith 9 S River St. Aurora	TW7-5722
Minn	Saunders & Co. 8 Prospect St. Waltham 54	TW4-0071
NY	H. F. Smith 205 W 14th St. New York 11	CH2-2200
Pa	W. F. Satterlewhite Box 884, Havertown	
	H-B INSTRUMENT CO. American & Bristol Sts. Philadelphia 40, Pa	DA9-9125
Cal	Bellows Co. 420 Market St. San Francisco 11	
Cal	R. Sydney Hopkins Co. 15016 Ventura Blvd. Sherman Oaks	ST8-5601
Conn	F. P. Corbiere 34 Hanstrom Pl. Enrayton	
Ga	G. E. Kocin & Co. 146 Walker St. SW, Atlanta 3	
La	Williamson Sales Co. Box 1687, Shreveport	
NY	C. V. Stevens 5564 Main St. Buffalo 21	
Ore	J. A. Thaler & Associates, Inc. 1004 SE Hilmon St. Portland 14	
Wash	O. Hagensen 30 Connecticut St. Seattle 4	
Wis	Kirchmayer-Seidel Co. Box 31, Milwaukee 13	
Can	J. E. Kearney Corp. Box 670, Guelph, Ontario	
	HBS-SINGER, INC. Science Park, Box 60, State College, Pa	AB0-7611
DC	HBS-Singer, Inc. 1707 H St. NW, Washington	DE7-3456
NY	HBS-Singer, Inc. 300 5th Ave. New York	OX5-8875
	HACKER & CO., INC., WILLIAM J. Box 444, Westwood, NJ	CA6-8400
Cal	Mac Erb Instrument Co. 3041 W Olympic Blvd. Los Angeles 19	
Cal	Erb & Gray Scientific Inc. 864 S Figueroa St. Los Angeles 17	
Cal	Technical Instrument Co. 60 Golden Gate Ave. San Francisco 2	
Ga	Stokes Scientific Instrument Co. 1380 Oxford Rd. NE, Atlanta 5	
Ill	C. H. Lanzing Co. 404 W Hubbard Ave. Chicago 54	
Mass	K. A. Dawson Co. 168 Concord Ave. Belmont 78	
Mich	Chetkovich - K & L Scientific P. O. Box 68, Ann Arbor	
Minn	J. Kluegel Co. Griggs Midway Bldg. St. Paul 4	
NY	Monroe Microscope Service P. O. Box 656, Rochester	
Pa	Bader Scientific Co. 815-814 Penn Ave. Pittsburgh 22	
Tex	G. E. Miller 1717 N Garrett St. Dallas 8	
Wash	Scientific Supplies Co. 600 Spokane St. Seattle 4	
	HADFIELDS LTD. Velcon Rd. Sheffield 9, Eng	SHE.7081
NY	E. S. Tomkins Inc. 140 Broadway, New York	WO4-1455
Arg	H. J. Hole, S.R.L. Moreno 482, Buenos Aires	DU8000
Aus	Hamocin Rosbaugh Pty. Ltd. 517 Little Collins St. Melbourne C.1, Victoria	MU.7204
Belg	Jacobsen S.P.R.L. 168, Rue de la Loi, Brussels	30.05.66
Can	H.M.K. Sales Ltd. 8005, Cavendish Blvd. Montreal 26	HU9-5009
Fr	Maugas Freres & Maillard 32, Rue Du Fouteuille, Rouen	70.23.15
Ger	Minex Export - Import Adenauer 36, Dusseldorf	54.38.27141
Holl	Zeevenhooven & Co. N.V. Keizersgracht 28, Rotterdam	36660
India	Blackwood Hodge (India) Private Ltd. 189 Belinghata Rd. Calcutta 18	54-1087
Ital	Le Montecatina S.A.R.L. 65, Foro Bonaparte, Milan	600.808
NZ	Richardson McCabe & Co. Ltd. 210-5 Willis St. Wellington C.3	70-789
Swed	A/B Mirall & Bergendahlar Dannningsgatan 16, Stockholm 16	V4324040

TERR	MANUFACTURERS SALES/OR REPRESENTATIVES OFFICES	TEL. NO.
	HAGAN CHEMICALS & CONTROLS, INC. Box 1346, Pittsburgh 30, Pa	WA3-3737
Ala	J. W. Edelman & Co., Inc. 1023 - 20th Ave. S, Birmingham 5	TR0-3403
Cal	Hagan Chemicals & Controls Inc. 2040 Tunnely Blvd. South Gate	LO9-2206
Cal	Hagan Chemicals & Controls Inc. 1455 Bayshore Blvd. San Francisco 24	JU7-0705
Colo	Hagan Chemicals & Controls Inc. 1600 W 12th Ave. Denver 15	MT7-2720
Ill	Hagan Chemicals & Controls Inc. 211 S Main St. Lombard	MA5-1740
Md	Pure Engineering Co. 803 Thayer Ave. Silver Spring	JU5-0300
Mass	R. L. Williams, Inc. 77 Summer St. Boston 10	HU6-3950
Minn	Paul Economy Engineering Co. 610 New York Bldg. St. Paul 1	CA6-5481
NY	Stanley & Sangmeister 271 Madison Ave. New York 16	LE5-0300
NC	J. W. Edelman & Co., Inc. 1000 Morehead Dr. Charlotte 6	EL3-2000
Pa	Pure Engineering Co. 1616 Locust St. Philadelphia	KI5-9730
Pa	Hagan Chemicals & Controls Inc. Rt. 60 & Campbell's Run Rd. Moon Run	WA5-2727
	HALAMAN MANUFACTURING & SERVICES Lodrigodales Rhein, Ger	4671
	HALEX INC. 350 E Imperial Ave. El Segundo, Cal	
Cal	E. S. Cowden Co., Inc. 8400 Wilshire Blvd. Los Angeles	DU1-0963
Mid	Rowles Engineering Sales Co. 2520-C Wisconsin Ave. Alexandria	AX9-5575
NY	R. J. Merry Associates 1790 Broadway, New York	CI5-5400
Tex	E. G. Miller, Jr., Co. P.O. Box 555, Henderson	5040
Va	W. F. Sacerdotestr 108 E Township Line Rd. Havertown, Pa	EL5-0861
Wash	Components Inc. 3 Roanoke St. Seattle 4	MA4-5330
Can	McPhar-Robers, Ltd. 120 Bond Ave. Don Mills, Ontario	HA4, 4464
Pac	Cannels & Inst. (Overseas) Co. 16 E 40th St. New York, NY	MU5-1831
	HALLAMORE ELECTRONICS DIV. 754 Broadhurst, Anaheim, Cal	PE6-1050
Cal	Hallamore Electronics 1474 Barnes Dr. Sunnyvale	
DC	Hallamore Electronics 1401 K St. NW, Washington	ME5-2050
	HALLETT MFG. CO. 5710 Bancroft St. LA 16, Cal	BR9-3094
Ill	A. F. Miller 1050 Sacramento Ct. Carpentersville	HA6-1802
Mich	J. Hoyer 20040 Shadowne Dr. Mt. Clemens	MO9-0006
	HAMILTON KENT MFG. CO. 427 Grant, East, Ohio	OR5-9555
Cal	Henry M. McCarthy Box 2005, Van Nuys	TR3-4955
Ga	Hoover Air & Hydraulic Eqpt. 354 Pecos Ferry Rd. NE, Atlanta 5	CE7-0464
Ill	Dubly Tool Co. 4000 W Fullerton Ave. Chicago 39	MI7-2221
Mass	W. A. Smith 980 Lincoln St. Hingham	HO-4000
NY	Bulcrus Assoc. 1133 E 35th St. Brooklyn 10	DO3-3211
NY	Pigue Machinery Co. 166 Hemlinger Rd. Tonawanda	EM9050
Ohio	CKM Industrial Sales 4007 Dunore, Cincinnati 9	EA1-5500
Ohio	C. B. Pelcaum 1225 Ludlow Ave. Cincinnati	EU-2004
Ohio	Reynolds Mach. Co. 2107 Carnegie Ave. Cleveland 15	EM1-3745
Va	E. Douglas Vis 1826 Terrace Rd. SW, Roanoke	DE3-0974
	HAMILTON MFG. CO. Two Rivers, Wis	TW651
Cal	J. Cowley 710 Industrial Way, San Carlos	LT1-7301
Colo	W. Hortlin & Co. 1640 Wazee, Denver	AM6-2001
DC	J. T. Steffes 807 10th St. Washington 5	EX3-2260
La	L. C. Lehman & Associates 1238 Dublin St. New Orleans	UN1-4466
Mass	R. H. Gibson Box 176, Wayland	DA6-5097
Mich	R. F. Farwell Co. 405 W 7 Mile Rd. Detroit 3	TO8-8231
Minn	Haldeman-Homme Inc. 1550 University Ave. St. Paul 14	MI5-8405
NY	G. W. Nagler 19 Patricia St. Binghamton	BA5-1505
NY	C. Collinge 470 Merrick Rd. Lynbrook	LY3-5300
Ohio	Smith & Schaefer 2717 Eastern Ave. Cincinnati 26	EA1-8374
Tex	C. L. Blake 2340 Forest Park Blvd. Fort Worth	WA6-0230
Wis	Milwaukee Equipment Co. 4021 N 35th St. Milwaukee 10	HI5-3040
	HAMILTON STANDARD DIV. UNITED AIRCRAFT CORP. Sect. 2, Main St. Broad Brook, Conn	HA3-1621
Cal	Hamilton Standard Div. 9070 W Pico Blvd. Los Angeles 35	CR1-0186
DC	Hamilton Standard Div. 1413 K St. NW, Washington	ST3-5300
Ohio	Hamilton Standard Div. Hulman Bldg. Dayton	BA4-0714
	HANNEL-DAHL/FOSTER ENGINEERING DIV. GEN CONTROLS CO. Warwick Industrial Pk. Warwick, RI	ST4-0300
Cal	General Controls Co. 801 Allen Ave. Glendale	VI8-1425
NY	General Controls Co. 500 E 42nd St. New York	OR6-0336
Ohio	General Controls Co. 4817 Chester Ave. Cleveland 3	EX1-0066
Pa	General Controls Co. 1335 Indiana Ave. Port Washington	MU5-7940
Tex	General Controls Co. 3607 S Sandman St. Houston 6	JA5-5871
Tex	General Controls Co. 1004 N Industrial Blvd. Dallas 7	RI-3404
	HANNER ELECTRONICS CO. Box 531, Princeton, NJ	PE7-1320
Cal	McCarthy Associates 1005 E Walnut St. Pasadena	ST5-9730
DC	Hanner Electronics Co. Inc. 9406 16th Pl. Cheverly, Md	PR-5579
Fla	Col-Ins-Co., Inc. 9720 Precision Dr. Orlando	CH3-1501
Mass	Beyronics Co. 1 Park Ave. Ext. Arlington	MU9-8200
Mich	B. Z. Bates Co. 19800 Pontiac Ave. Detroit	EM4066
NJ	Lenkher Enterprises Box 68, Hurley	HO7-2300
NY	J. R. Lightcover 230 Westminster Ave. Syracuse	GR3-8833
Pa	H. E. Rensford Co. 6400 Clairton Blvd. Pittsburgh 36	TU6-3425
Tex	Scientific Sales Co. 8000 Lemmon Ave. Dallas	LA8-8225
Wash	R. S. Drake Associates 1017 Norman St. Seattle 44	EA3-5566
Can	McPhar-Robers Ltd. 120 Bond Ave. Don Mills, Ontario	HA4-4464
Pac	Healey & Co. 205 E 44th St. New York 17	TU8-5544
	HANSFORTHY ENGINEERING LTD Poole, Dorset, Eng	POOLE9
Aust	A. E. Goodwin Ltd. 185, Bathurst St. Sydney N.S.W.	MU8685
Belg	Soc Belge Cousley, S.P.R.L. 24-26 Blvd. Leopold II, Brussels	BR05.17.71
Can	Dynamic Engineering Ltd. 905, St. Antoine St. Montreal P.Q.	UN1-1453
Den	Dr. Dyle St. Kongensgade 14, Copenhagen K	CE3801
Fin	Valmomet Osakeyhtio Eerikinkatu 16, Helsinki	12 32 01
Fr	Establissement Tissot 3, bis, Rue de la Gaume, Paris VIIIe	BAY-10
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Ohio J. P. Holzwarth ..... 1307 N Ludlow, Dayton 3 ..... BA8-2097

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INTERNATIONAL EQUIPMENT CO. ..... [illegible] Fuller Rd. Boston 22, Mass ..... [illegible]

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INTERNATIONAL GAS DETECTORS LTD. [illegible] St. Wilson St. Leeds 11 Yorks, Eng ..... [illegible]

Eng	Mesers. Oldham & Son Ltd.	[illegible]

INTERNATIONAL INSTRUMENTS, INC. Box [illegible], New Haven 11, Conn

Cal	Kirkham Co.	[illegible]
Colo	Scientific Instrument Co.	[illegible]
DC	F. E. Gilgenast, Jr.	[illegible]
Fla	W. E. Lehmann Co.	[illegible]
Ill	Gasser & Clark Co.	[illegible]
Kan	M. E. Smith Co.	[illegible]
Mass	Richter Assoc.	[illegible]
Mich	Meachen, James & Co.	[illegible]
Minn	M. H. Kirkby	[illegible]
NC	MacGuire Instrument Co.	[illegible]
Ohio	R. G. Gimbel & Co.	[illegible]
Pa	C. E. Hile Co.	[illegible]
Tex	J. B. Gardner	[illegible]

INTERNATIONAL MINERALS & CHEMICAL CORP.
[illegible] Orchard Rd. Skokie, Ill

INTERNATIONAL PUMP & MACHINE WORKS [illegible] Dexter Ave. Livingston, NJ ..... [illegible]

DC	H. Baker	[illegible]

INTERNATIONAL RECTIFIER CORP. [illegible] Kansas St. El Segundo, Cal ..... [illegible]

Ill	Intl. Rectifier Corp.	[illegible]
Md	Intl. Rectifier Corp.	[illegible]
Mass	Intl. Rectifier Corp.	[illegible]
Mich	Intl. Rectifier Corp.	[illegible]
NY	Intl. Rectifier Corp.	[illegible]
NY	Intl. Rectifier Corp.	[illegible]
Pa	Intl. Rectifier Corp.	[illegible]

INTERNUCLEAR CO. ..... 7 N Brentwood Blvd. Clayton 5, Mo ..... [illegible]

Cal	Pentelite Corp.	[illegible]
DC	Internuclear Co.	[illegible]
Ohio	Pentelite Corp.	[illegible]
Ohio	Pentelite Corp.	[illegible]
Tex	Pentelite Corp.	[illegible]
Bel	F. E. Love	[illegible]
Jap	Tokyo Trade Kaisha, Ltd.	[illegible]
Venz	L. Mesa Leal	[illegible]

INTERSTATE INDUSTRIAL UNIFORM RENTAL SERVICE [illegible] Parker St.
Indian Orchard, Mass ..... [illegible]

NM	Interstate Ind. Laundry, Downtown, Inst. County Rd. Santa Fe.	

INTERTECHNIQUE S. A. [illegible] rue Escudier
Boulogne-Billancourt, Seine, Fr ..... [illegible]

Aust	Intrapa A. G.	[illegible]
Belg	Mechanical S. A.	[illegible]
Eng	Miles Steel Limited	[illegible]
Ger	Reichert-Fleischmann	[illegible]
Indl	Compagnie Generale D'Electricite-Radiographie	[illegible]
Isr	Dawmatex	[illegible]
Ital	Electroscientifica	[illegible]
Jor	Lehmdahl	[illegible]
Port	Fax Portuchemica Industrial	[illegible]
Spn	Perlas	[illegible]
Swed	Bergman & Beving AB	[illegible]
Swit	Medicosa AG	[illegible]

INTERSION-PREPARET ..... [illegible] Euclid Ave. Bldg.
Cleveland 14, Ohio ..... [illegible]

Ga	Intersion-Preparet, Inc.	[illegible]
Ill	Intersion-Preparet, Inc.	[illegible]
Mass	Intersion-Preparet, Inc.	[illegible]
Mich	Intersion-Preparet, Inc.	[illegible]
Mo	Intersion-Preparet, Inc.	[illegible]
Mo	Intersion-Preparet, Inc.	[illegible]
Pa	Intersion-Preparet, Inc.	[illegible]
Wash	Intersion-Preparet, Inc.	[illegible]
Wis	Intersion-Preparet, Inc.	[illegible]
Can	Intersion-Preparet, Inc.	[illegible]
HCC	Intersion-Preparet, Inc.	[illegible]

IPSEN INDUSTRIES, INC. ..... Box [illegible], Rockford, Ill ..... [illegible]

Cal	Ipsen Industries, Inc.	[illegible]
Fla	D. C. Jackson Co.	[illegible]
Ill	Specialab of Rockford, Inc.	[illegible]
Mich	Ipsen Industries, Inc.	[illegible]
NJ	Ipsen Industries, Inc.	[illegible]
Ohio	Ipsen Industries, Inc.	[illegible]
Tex	M. E. Grigg Co.	[illegible]

IRON FIREMAN MFG. CO., ELECTRONICS DIV. ..... [illegible] SE 9th Ave. Portland 2, Ore ..... [illegible]

Ariz	PETCO	[illegible]
Cal	C. W. Mendelle Co.	[illegible]
Cal	A-P Sales Engineering	[illegible]
Conn	Gates-Hess Inc.	[illegible]
Ill	Bemis & Klein Associates	[illegible]
Ind	F. C. Valentine, Inc.	[illegible]
Mich	Zendler-Pearson Co.	[illegible]
Minn	Northper Engineering Inc.	[illegible]
Mo	W. E. Fry Co.	[illegible]
NJ	E. E. Hughes Co., Inc.	[illegible]
Utah	Rowley-Bowman Inc.	[illegible]
Wash	Associates Inc.	[illegible]

IRVIN & PARTNERS LTD., E.G. [illegible] Sandwich St. London S E 1, Eng ..... [illegible]

HOLANITE MFG. CORP. ..... 357 Vesey Ave. Stirling, NJ HU-5300
Cal Maybank & Harrell, Inc. ..... 970 Tennessee St. San Francisco 7 ..... ATB-0040
New Isolitile Cover Associates ..... Box 755, Needham 92 ..... HIS-1400

HOMET CORP. ..... 433 Commercial Ave. Palisades Park, NJ .. WA-4700

HO/SERVE, INC. ..... 131 Portland St. Cambridge 39, Mass UN-4-0425
NY HO/Serve, Inc. ..... 350 5th Ave. New York 36 ..... PL9-3080

HOTOPE ACCESSORIES CO. ... 5352 Westminster Ave. Philadelphia 31, Pa. SHE-2330
Ill Horlacher-Chicago Corp. ..... 200 E Howard St. Des Plaines
Minn Tinnerish Inc. ..... 3601 Tupelo St. Waldoro
Mass Sand-Aztec Inc. ..... 30 University St. Cambridge
NY Fisher X-Ray Corp. ..... 50 S Broadway, White Plains

HOTOPE DEVELOPMENTS LTD. Bath Rd. Beaulieu, Reading, Berks, Eng .. WO2121-2
Aus Aumacor Eng. Labs. Pty. Ltd. ..... 480 William St. Melbourne, C.1.
Belg Impulsion-Mauser ..... 52 Rue Saint-Robert, Brussels 15
Can Conway Electronic Enterprises ..... 1514 Islington Ave. W. Toronto 10, Ont.
Den H. Hansen Chemiske Lab. ..... Sankegade 26, Copenhagen K
Ger Wallowitz ..... Solingen-Ohligs, Hochbaum St. 68A
Holl Ingenieurskantoor Elektron ..... Bergweg 11, Amsterdam
Ind Jem Engineering Co., Ltd. ..... 6a Pherozshah Mehta Rd. Bombay 1
Isr M. Berlin ..... Box 1147, Jerusalem
Ital Angles ..... Corso Venezia 37, Milan
Jap Tuyo Trading Co., Ltd. ..... 2, 1-chome, Hongoku-cho, Kibun-bashi, Chuo-Ku, Tokyo
N Z Neill Cropper & Co., Ltd. ..... Box 74, Auckland
Pak Asme Investment Mfg. (Pakistan) Ltd. ..... 7 W Wharf Rd. Karachi

HOTOPES INC. ..... 123 Woodland Ave. Westwood, NJ HO4-3900
Minn R. P. Mahon ..... South Lincoln CLS-5500

HOTOPES SPECIALTIES CO. ..... Box 488, Burbank, Cal VIS-2270
Ala Aumacor-Burnsico Corp. ..... 111 W Jewel Ave. St. Louis 20 ..... TAS-1061
Ill W. S. Johnson & Associates ..... 107-108 Camelia St. Boston DEA-8232
Ohio The Dean Co. ..... 4306 Chester Ave. Cleveland 3 ..... EXY-7240
Tex Southwestern Eng. & Equip. ..... 4848 Lemmon Ave. Dallas 19 ..... LAS-7432
Utah Applied Engineering Prods. Co. ..... 455 Felt Bldg. Salt Lake City 11 ..... EMe-4040

ITAL ELETTRONICA S.p.A. ... Via Ignazio Pettinengo 72, Rome, Italy ... 45-46-20
Ital Ital Elettronica ..... Via Camillo Hajech 5, Milano 91-38-97

ITEK CORP. ..... 130 Spring St. Lexington, Mass

JACKSON & MORELAND, INC. .. 400 Park Square Bldg. Boston 16, Mass ... HU2-8100
DC Jackson & Moreland, Inc. ..... 1026 Conn. Ave. NW, Washington DU7-2566
DC Jackson & Moreland Intl., Inc. ..... 1026 Conn. Ave. NW, Washington DU7-2566
NY Jackson & Moreland, Inc. ..... 370 Park Ave. New York 22 ..... PLS-5040

JAMES, POND & CLARK, INC. ... 2300 E Foothill Blvd. Pasadena, Cal SY3-9195
Ala Emery Drugs & Equipment Co. ..... Box 9013, Birmingham 13 ..... TR1-1360
Cal Power Transmission Eng. Corp. ..... 88 Keyes St. San Jose AXH-2100
Colo Industrial Service Co. ..... Box 1045, Denver 17 ..... ALS-5107
DC J. C. Donghan & Associates ..... 1413 K St. NW, Washington 5 ..... STD-3613
Ill Hosmer Engineering Co. ..... 5115 W Monroe St. Chicago 30 ..... ESA-1300
Kan D & O Engineering Co., Inc. ..... Box 2107, Wichita AMD-8214
Minn Lenkin, Inc. ..... 108 W Stephens St. Wayzata 9 ..... PLG-4007
Mich J. M. Boal Co. ..... 5000 E Grand Blvd. Detroit 11 ..... TUS-1397
NY J. V. Tripoli & Co. ..... 1023 Pillsover Ave. Buffalo 11 ..... DA1777
NY Hummel Technical Products ..... 69 West St. New York 6 ..... DA5-9600
Ohio Scott Equipment Co. ..... 2710 Lee St. Dayton 4 ..... DAS-8141
Wash Atlantic Linoleum, Inc. ..... 6007 Airport Way, Seattle 8 ..... PAS-7000

JARRELL-ASH CO. ..... 26 Farwell St. Newtonville 60, Mass DE2-2130
Cal Jarrell - Ash Co. ..... 1700 Lexington Ave. San Mateo FI1-3814
Cal Jarrell - Ash Co. ..... 5000 Fordham Dr. Coco Mesa KI6-1300
Ga Jarrell - Ash Co. ..... 1400 Monroe Dr. NE, Atlanta 5 ..... TR6-9020
Ill Jarrell - Ash Co. ..... 607 Roosevelt Rd. Lombard MA9-1600
Mich V. Wallbridge ..... 18867 Woodland St. Detroit KE1-4207
NJ Jarrell - Ash Co. ..... 347 Livingston Ave. New Brunswick KI6-8005
Pa Jarrell - Ash Co. ..... 616 Greenfield Rd. Pittsburgh 9 ..... TA1-2900
Tex Southwestern Eng. & Equipment Co. ..... 4848 Lemmon Ave. Dallas 19 ..... LAS-7400
Ont Technical Service Laboratories ..... 206 King St. W. Toronto 99 ..... EM3-4040

JEN PENETRAMETER MFG. CORP. ..... 6 Grace Dr. Hatfield, Mass OL3-8900

JENKS GLASPERE SCHOTT & GEN. 10 Hatchcotts Maine-Hoch, W Ger ... 44-0761
NY Fido-Schumann Corp. ..... 70 Pearman St. New Rochelle NO6-1204
Aust S. E. Minty Pty. Ltd. ..... 97 Walker St. N. Sidney, NSW ..... XB 8023
Fr Etn. S.A.M.P.I. ..... 55 rue Louis-le-Grand, Paris ..... OP 22-42
GB H. V. Gas Ltd. ..... 300 Hale St. Birmingham ..... PR 2513
Ital Insigne ..... Via Zara 38, C.P. 874, Genoa 36 38 50

JENNINGS RADIO MFG. CORP. 970 McLaughlin Ave. San Jose 8, Cal CY2-4825

JERGUSON GAGE & VALVE CO. Adams St. Burlington, Mass
Cal Bedwell Controls & Eqpt. Co. Inc. ..... 5127 W Jefferson Blvd. Los Angeles WE7-1204
Cal Dave Equipment Co. ..... 1000 Mountain Blvd. Oakland 11 ..... OL6-0970
Colo Davis & Davis ..... 1204 Mining Exchange Bldg. Denver 2 ..... ALS-0420
Ga W. S. Stallings Co. ..... 2159 Maple Dr. NE, Atlanta CE7-0000
Ill Measure & Controls, Inc. ..... 444 N Lafayette St. Chicago 10 ..... WHe-1440
Minn G. E. Kutzler Co. ..... 100 S Dodman St. Rosemount LD-1000
Mo O'Brien Equipment Co. ..... 2001 Olive St. St. Louis 3 ..... RE-2001
NY J. A. Moore Co. ..... 242 Madison Ave. New York 17 ..... MU2-5420
Ohio R. S. Bowers Co. ..... 1400 W 117th St. Cleveland 7 ..... AC1-0440
Ohio Alfa Sales Co. ..... 804 Bldg. Tulsa DE5-0540
Pa W. J. Gallagher Co. ..... 2701 N Broad St. Philadelphia 40 ..... BA9-0940
Tex B. Oxiles Fitting Co. ..... 9720 Katy Rd. Houston 24 ..... HO6-0651

JERPAK-BATLES CO. ..... 3450 Lake Rd. Salem, Ohio CH8-0307
Ariz Alva Sales Co. ..... 3701 E Indian School Rd. Phoenix AM5-3413
Cal L. O. Jaqbak ..... 15147 Clubes Dr. San Jose 26 ..... BY7-0942
Cal C. E. Johnson ..... 1349 Adler Ave. San Gabriel AT6-0482

Ill E. Johnson & Son ..... 6000 W Ogden Ave. Bronxville HU5-1400
Ind C. L. Martin Co., Inc. ..... 205 W 40th St. Indianapolis 8 ..... HU5300
Mich E. D. Wolf & Associates ..... 411 East Dr. Marshall
Minn C. M. Robins Co. ..... Box 755, Flint 1 ..... CE5-4005
Minn Metal-Tools & Equip. Co. ..... 1000 N Washington Ave. Minneapolis 11 .. JA2-3330
NY Tri-City Tool & Mach. Co. Inc. ..... 3401 Delaware Ave. Kenmore 17 ..... NT3262
NY A. G. Landow ..... 17 W 60th St. New York 23 ..... COS-3400
Ohio J. B. Kuntz Co. ..... 1220 McCook Ave. Dayton 4 ..... BA4-0050
Wash D. H. Lemlin Co. ..... 4803 9th, NW, Seattle 7 ..... SU4-0030

JIG-O-STENCEC ..... Rokkoh, Ku. Hob. Gor HA7667
Jap Nippon Cambridge Ltd. ..... Minato Nagoya MA001601

JOHNS-MANVILLE ..... 22 E 40th St. New York 16, NY LE3-7000
Cal Johns-Manville ..... 611 S Catalina St. Los Angeles 5 ..... DU5-0505
Cal Johns-Manville ..... 1020 New Montgomery St. San Francisco 3 ..... DO5-4553
Ga Johns-Manville ..... 101 Marietta St. Atlanta 3 ..... JA6-2081
Ill Johns-Manville ..... Merchandise Mart Plaza, Chicago 54 ..... DE7-1144
Mass Johns-Manville ..... 199 Conewoy St. Boston CA7-0400
Mo Johns-Manville ..... 7912 Bonhomme Ave. Clayton, St. Louis 5 PA1-4000
Ohio Johns-Manville ..... Central Pkwy. at Walnut St. Cincinnati 2 PA1-5840
Ohio Johns-Manville ..... 3101 Euclid Ave. Cleveland 15 ..... UT1-8700
Pa Johns-Manville ..... Chestnut at Fourth, Philadelphia 6 ..... WA3-5900
Pa Johns-Manville ..... 2216 Koppers Bldg. Pittsburgh 19 ..... AT1-4040
Tex Johns-Manville ..... 2115 Hadgett St. Houston 4 ..... JA6-1751

JOHNSON & ASSOC. INC. WILLIAM B. Box 415, Montclair Lakes, NJ DE4-0222

JOHNSON CORP. ..... 409 Wood St. Three Rivers, Mich CH8-1715
Cal Colpacific Equipment Co. ..... 60 Hawthorne St. San Francisco 5 ..... CA1-4720
Cal G. L. Wooten & Son ..... 6502 E Washington Blvd. Los Angeles 22 .. AN8-2902
Ga Abbey Steam Specialty Co. ..... 804 Murphy St. SW, Atlanta 10 ..... PL8-0060
Ill Johnson-Power Co. ..... 6001 W Grand Ave. Chicago 39 ..... MA5-8400
Mass Power Specialties Co. Inc. ..... 171 Broadway, Arlington 74 ..... ME8-4020
Minn Blast-Trans Co. ..... 3000 Riverside Ave. Minneapolis 6 ..... FE9-7119
NY Advance Engineering Co. ..... 69 Dey St. New York 7 ..... BA9-2040
NY Avend Equipment Co. Inc. ..... 900 Niagara St. Buffalo 13 ..... GA5-407
NC Mechanical Equipment Co. ..... 216 Providence Rd. Charlotte ED6-0106
Ohio Tomlinson Steam Specialty Co. ..... 1800 St. Clair Ave. Cleveland 14 ..... PR3-4108
Pa Associated Steam Specialty Co. ..... 810 Race St. Philadelphia 7 ..... MA7-8400
Tex G. S. Allen & Co. ..... 801 S Akard St. Dallas 2 ..... RE8-4577

JOHNSON SERVICE CO. ..... Milwaukee 1, Wis BR6-1000
Cal Johnson Service Co. ..... 632 N Alvarado St. Los Angeles 26 ..... DU7-2201
Cal Johnson Service Co. ..... 1660 Mission St. San Francisco 3 ..... UN1-6333
Colo Johnson Service Co. ..... 1230 California St. Denver 4 ..... CH6-2401
DC Johnson Service Co. ..... 2117 M St. NW, Washington 7 ..... FE7-1000
Ga Johnson Service Co. ..... 400 Bishop St. NW, Atlanta 18 ..... TR4-0814
Ill Johnson Service Co. ..... 1850 Washington Blvd. Chicago 7 ..... HA1-2121
Mass Johnson Service Co. ..... 66 Mouldon St. Cambridge 39 ..... KI7-8006
Mich Johnson Service Co. ..... 840 Hilton Rd. Detroit 30 ..... LE-0022
Mo Johnson Service Co. ..... 1027 Wyandotte St. Kansas City 5 ..... VE-5500
NY Johnson Service Co. ..... 13-30 47th Ave. Long Island City 1 ..... EM1-9700
Pa Johnson Service Co. ..... 1000 N 12th St. Philadelphia 23 ..... BA5-0020
Can Johnson Controls Ltd. ..... 250 Bermondsey Rd. Toronto 16, Ont. PL7-5251

JOHNSTON LABS. INC., WILLIAM H. 3677 Woodland Ave. Baltimore 15, Md. .. HO4-0400

JONES & LAUGHLIN STEEL CORP. 3 Gateway Center, Pittsburgh 30, Pa ... CO1-7400
Cal Jones & Laughlin Steel Corp. ..... 523 S Flower St. Los Angeles 17 ..... MA4-1970
Cal Jones & Laughlin Steel Corp. ..... Sun Bldg. San Francisco 4 ..... EX3-0260
Ga Jones & Laughlin Steel Corp. ..... Fulton Federal Bldg. Atlanta 3 ..... JA3-6005
Ill Jones & Laughlin Steel Corp. ..... Field Bldg. Chicago 3 ..... FR2-1704
Md Jones & Laughlin Steel Corp. ..... Mechanics Bldg. Baltimore 2 ..... MU5-0800
Mass Jones & Laughlin Steel Corp. ..... 10 High St. Boston 10 ..... HU5-5151
Mich Jones & Laughlin Steel Co. ..... 12001 Hubbell Ave. Detroit 16 ..... TR6-1800
NY Jones & Laughlin Steel Corp. ..... 270 Park Ave. New York 17 ..... TU6-6000
Ohio Jones & Laughlin Steel Corp. ..... Union Commerce Bldg. Cleveland 14 ..... MA1-7000
Ohio Jones & Laughlin Steel Corp. ..... Far Hills Bldg. Dayton 19 ..... AX9-7251
Pa Jones & Laughlin Steel Corp. ..... Suburban Sta. Bldg. Philadelphia 3 ..... LO5-0700

JORDAN CONTROLS INC. ..... 3225 W Hampton Ave. Milwaukee 9, Wis OP1-0240
Cal W. H. Del Mar Co. ..... 3938 W Slauson Ave. Los Angeles 43 ..... AX5-6421
Cal McCarthy-Hood & Associates ..... 1485 Bayshore Blvd. San Francisco 24 ..... JO6-1860
Colo J. H. Darough Co. Inc. ..... 1307 Harlan St. Denver 4 ..... BR7-2925
Ill Clarkson Engineering Co. ..... 705 N Laramie Ave. Chicago 44 ..... AU7-4272
Kan H. F. Ziegler Co. ..... 4308 Cambridge St. Kansas City 3
Mich J. Boyle Engrg. Co. ..... 13050 Houston Ave. Detroit 5 ..... DU1-2040
Mo H. F. Ziegler Co. ..... 4308 Cambridge St. Kansas City 3, Kan
NY Jordan Engineering Co. ..... 120 Court St. White Plains WH9-1053
NY R. Fleckenstein ..... 210 Burnphrey Dr. Syracuse 9 ..... HU8-7202
Ohio S. J. Yorch ..... 4519 E 52nd St. Garfield Hts. 25 ..... VU3-6000
Ohio Wiley-Mray Electric Co. ..... 1533 Central Pkwy. Cincinnati 14 ..... PA1-4720
Pa Jackson Engineering Co. ..... 211 Ford Rd. Bala-Cynwyd MO4-9811

JOY MFG. CO. INDUSTRIAL DIV. H. V. Oliver Bldg. Pittsburgh 22, Pa GR1-2140
Cal Joy Mfg. Co. ..... 5400 E Washington Blvd. Los Angeles 22 ..... RA5-8205
Ill Joy Mfg. Co. ..... 100 W Washington Blvd. Chicago 6 ..... DE5-4270
Mass Joy Mfg. Co. ..... 2nd Ave. Burlington BR2-0000
Mich Joy Mfg. Co. ..... 17005 W Mottfield Rd. Detroit 35 ..... KE7-0800
NY Joy Mfg. Co. ..... 100 Church St. New York 7 ..... CO7-0545
Ohio Joy Mfg. Co. ..... 16141 Puritan Ave. Cleveland 30 ..... CL1-0444
Pa Joy Mfg. Co. ..... 1420 Walnut St. Philadelphia 2 ..... PE5-1414
Pa Joy Mfg. Co. ..... 3021 Bankville St. Pittsburgh 16 ..... LO5-4000
Tex Joy Mfg. Co. ..... Box 13187, Dallas 30 ..... FL7-3040
Tex Joy Mfg. Co. ..... 1023 Wyoming St. El Paso KE5-2151
Utah Joy Mfg. Co. ..... 800 S 6th W, Salt Lake City 10 ..... DA5-0402

K-F PRODUCTS, INC. ..... 2100 E 42nd Ave. Denver, Colo KE7-0441

KAHL SCIENTIFIC INSTRUMENT CORP. Box 1566, El Cajon, Cal HA4-0904
NY KAHLICO ..... 12 E 18th St. New York 3 ..... WA4-0020

KAHLENBERG BROS. CO. ..... 1316 S Hanover St. Two Rivers, Wis 307

KAIRN & CO. INC. ..... Box 516, Hartford 1, Conn JA6-0543

KAISER ENGINEERS ..... 300 Lakeside Dr. Oakland 12, Cal GR1-2211
DC Kaiser Engineers ..... 1025 Eye St. NW, Washington ST3-1555
Ill Kaiser Engineers ..... 209 N LaSalle St. Chicago 1 ..... RA6-0027
Pa Kaiser Engineers ..... 300 Grant St. Pittsburgh 19 ..... AT1-7002
Can H. J. Kaiser Co. (Canada), Ltd. ..... 4900 Western Ave. Montreal 6 ..... HU8-5531
Eng Kaiser Engineers & Constructors, Inc. ..... Bond St. London, E.C., 4 ..... CIB6600
Switz Kaiser Engineers & Constructors, Inc. ..... Bahnhofstr 106, Zurich 1 ..... 95.56.00/97

KALFLEX, INC. ..... 101 Park Ave. New York 17, NY MO4-5306

KAMAN AIRCRAFT CORP. TEXAS MICROWAVE DIV.
Box 9431, Austin 17, Texas GL2-7625

KAMAN NUCLEAR ..... Garden of the Gods Rd. Colo. Springs, Colo
Cal C. W. Fowler Co. ..... 400 Hamilton Ave. Palo Alto DA1-1810
Md Taylor Engineering, Inc. ..... 2100 St. Paul St. Baltimore 18 ..... BE8-8126
Mo Automatrs-Burnsico Corp. ..... 111 W Jewell Ave. St. Louis 22 ..... TA2-1061
NY Scientific Sys. Sales Corp. ..... Box 3, Rapids 61 ..... BA5-0025

KATES CO., W.A. ..... 450 Washington Rd. Deerfield, Ill WE-0000
Cal Barron Sales Co. of California ..... 340 S Atlantic Blvd. Monterey Park AT8-3540
Cal Schlicow Co. ..... 450 Market St. San Francisco YU9-2113
Colo Equipment Specialties Co. ..... 171 Valleyo St. Denver SH4-2721
Fla L. E. Rogers Co. ..... 9 N Highland Ave. Clearwater 440-4000
Ga The Measure-Tool Co. ..... P.O. Box 13564, Sta. K, Atlanta CE1-4795
Ill Middlebro & Dunteth ..... 600 S Michigan Ave. Chicago WA9-1040
Minn W. B. Wickersham & Co. ..... 1440 Washington St. West Newton HA4-6000
NJ H. W. Johnson ..... 94 Exchange Pl. Jersey City HE3-1451
NY Stern & Heider Co. ..... 1706 Monroe Ave. Rochester GR8-8610
NC R. S. Hodgins Co. ..... P.O. Box 6001, Charlotte EM8-4407
Pa Penn-Del Instrument Sales Co. ..... 700 Bethlehem Pike, Philadelphia CH7-7300
Tex R. B. Stoddards Associates ..... P.O. Box 90, Houston CA8-1130

KAWECKI CHEMICAL CO., INC. 220 E 42nd St. New York, NY MU5-7040

KAY ELECTRIC CO. ..... Maple Ave. Pine Brook, NJ CA6-4000
Cal Kay Electric Co. ..... 12071 Lucille St. Garden Grove KY-1373

KAYNOR ENGINEERING CORP. Muskegon, Mich

KAYSER ELLISON & CO. LTD. CARLISLE STEEL WKS. Sheffield 4, Eng SU22124
Mass Wetherell Bros. Co. ..... 851 Albany St. Cambridge 39
Can Norton Steel Co. Limited ..... 100 Murray St. Montreal 3, Que

KEARFOTT DIV. GEN. PRECISION INC. 1150 McBride Ave. Little Falls, NJ CL6-4900
Ariz Kearfott Div., Gen. Precision, Inc. 36 Pima Plaza, Scottsdale
Cal Kearfott Div. Gen Precision, Inc. 1940 S Figueroa St. Los Angeles
Cal Kearfott Div. Gen Precision, Inc. La Grande Ave. Rancho Santa Fe
Cal Kearfott Div., Gen. Precision, Inc. 14844 Oxnard St. Van Nuys
Cal Kearfott Div., Gen. Precision, Inc. 301 Commercial St. Palo Alto
DC Kearfott Div., Gen. Precision, Inc. 777 14th St. NW, Washington 5
Fla Kearfott Div., Gen. Precision, Inc. 3756 E Hillsboro Ave. Pompano Beach
Ill Kearfott Div., Gen. Precision, Inc. 52 W Colfax Ave. La Grange
Mass Kearfott Div., Gen. Precision, Inc. 200 Main St. Cambridge
Ohio Kearfott Div., Gen. Precision, Inc. 333 W 1st St. Dayton 2
Tex Kearfott Div., Gen. Precision, Inc. 4211 Denton St. Dallas 35
Wash Kearfott Div., Gen. Precision, Inc. 3400 Maynard Way, Seattle

KEARNEY & TRECKER CORP. 4000 W National Ave. Milwaukee 14, Wis .. SE4-4000
Mich Kearney & Trecker Corp. ..... 14000 Puritan Ave. Detroit 38 ..... UN4-1100
NJ Kearney & Trecker Corp. ..... 400 Sylvan Ave. Englewood Cliffs LO6-7000
Ohio Kearney & Trecker Corp. ..... Euclid & E 17th St. Cleveland 15 ..... PR1-3000
Pa Kearney & Trecker Corp. ..... Suburban Sq. Bldg. Ardmore MI9-3150
Pa Kearney & Trecker Corp. ..... 4 W Montlie Ave. Pittsburgh 20 ..... WE2-3300

KEARSLEY & MATTISON CO. ... Ambler, Pa

KEELAVITE HYDRAULICS LTD. Allesley, Coventry, Warwickshire, Eng ... SUB441
Holl Keelavite Hydraulics Ltd. ..... Pieter de Hooghstr 17, Rotterdam

KEITH INSTRUMENT CO. .. 1223 Gambrier Ave. Columbus, Ohio HO4-6311
Ill Keith Instrument Co. ..... 2001A Pine St. Des Plaines VA1-3020
NJ Keith Instrument Co. ..... 41 Main St. Orange OR3-5041

KEITHLEY INSTRUMENTS, INC. 12415 Euclid Ave. Cleveland 6, Ohio PR5-2000
Cal T. L. Setzer Co. ..... 2054 W Pico Blvd. Los Angeles WE8-2273
Colo Wyoming Measurements, Inc. ..... 1215 Kenneth St. Denver PE3-3701
DC Keithley Instruments, Inc. ..... 5017 Bale Ave. Riverdale AP3-5171
Mass Keithley Instruments, Inc. ..... 36 Shawmut St. Salem CR4-7297
Minn Pulsar & Mac Co. ..... 1303 Nicollet Ave. Minneapolis FE8-0020
Mo Engineering Services Co. ..... 4000 Main St. Kansas City JE1-7765
NJ Keithley Instruments, Inc. ..... 2 Gadwin Ave. Ridgewood GH4-7340
NY Keithley Instruments, Inc. ..... 480 Oak St. Syracuse GR4-8061
Tex T. W. Eckland ..... Box 32102, St. Marys FE8-9173
Wash R. Drake Associates ..... 1817 Norman St. Seattle EA3-5544

KELK LTD., GEORGE ..... 5 Lancelot Rd. Don Mills, Ont. Can. HO3-0151

KELLEY & CO., O. G. ..... 90 Taylor St. Boston 22, Mass AV3-3700
Mass O. G. Kelley & Co. ..... Box 178, Shrewsbury VI2-0300
NJ O. G. Kelley & Co. ..... 800 Westfield Ave. Elizabeth EL2-1300
Ohio O. G. Kelley & Co. ..... 10000 Elmwood Ave. Cleveland CL2-0022
Tenn O. G. Kelley & Co. ..... 734 W Walnut St. Johnson City JO171

KELLEY INDUSTRIES INC. ..... Eighty-Four, Pa BA3-0900

KENNAMETAL, INC. ..... Latrobe, Pa HU7-3011
Cal Kennametal, Inc. ..... Box 10443, Vernon Sta. LA 58 ..... LU2-5121
Cal Kennametal, Inc. ..... 4005 19th Ave. San Francisco 27 ..... DE3-9744
Conn Kennametal, Inc. ..... Box 206, Windsor Locks WA3-2300
Ill Kennametal, Inc. ..... 5000 W 65th St. Chicago 38 ..... BR7-0400
Ind Kennametal, Inc. ..... 3401 N Meridian, Indianapolis 8 ..... WA3-6487

Mich	Kennametal, Inc.	16001 Capital Ave. Detroit 37
Ohio	Kennametal, Inc.	7600 Reinhold Dr. Cincinnati 37
Ohio	Kennametal, Inc.	4630 Bridge Rd. Willoughby
Pa	Kennametal, Inc.	1340 W Chelmsford, Phila. 20
Pa	Kennametal, Inc.	600 Grant St. Pittsburgh 19
Wis	Kennametal, Inc.	744 N Fourth St. Milwaukee 3

KENT CHEMICALS LTD. 1200 Franklin St. Vancouver 4, B C

KEPCO, INC. 131-38 Sanford Ave. Flushing 52, NY

Cal	V. T. Rupp Co.	801 Fedemas Ave. Los Angeles
DC	S. S. Lee Associates, Inc.	9021 Ennalls Ave. Wheaton, Md
Fla	S. S. Lee Associates, Inc.	P. O. Box 7095, Orlando
Ill	R. L. Long & Associates	6700 N Olmstead Ave. Chicago
Mass	R. Parson & Co. Inc.	1070 Centre St. Boston
Mich	The Ferrille Co.	4522 N Woodward Ave. Royal Oak
Mo	H. W. Kathrian & Co.	4366 Duncan Ave. St. Louis 10
NY	Nace Electronics, Inc.	110 Luther Ave. Liverpool
Ohio	The Ferrille Co.	705 W Ohio Pike, Cincinnati
Pa	Eastern Instrumentation, Inc.	612 Chelwisham Ave. Philadelphia 26
Tex	A. Barnes Co.	3000 Lemmon Ave. Dallas
Wash	H. Levinson Co.	1221 E Denny Way, Seattle 98

KESSLER CHEMICAL CO., INC. Penn Rd. & Cottman Ave. Phila 26, Pa

Ill	Kessler Chemical Co., Inc.	7301 Stony Island Ave. Chicago 49
Mass	Kessler Chemical Co., Inc.	115 High St. Boston 10
Mich	C. L. Hanson Co.	19140 James Couzens Hwy. Detroit 27
Mo	A. W. Finley	40 Beaver Dr. St. Louis 24
NY	Kessler Chemical Co., Inc.	50 Church St. New York 7
Tenn	L. E. Offutt Co.	Box 9003, Memphis 4

KEVANIRE MFG. CO. 2001 E Centre St. Adrian, Mich

Ala	Kevanire Mfg. Co.	901 N Martinwood Dr. Birmingham 6
Cal	T. Dewey Co. Inc.	1270 Temple Ave. Laguna Beach
Cal	M. J. Beach Inc.	12210 Tipuse Ln. Los Alios
Ill	Kevanire Mfg. Co.	715 Sheridan Rd. Evanston
Mo	Hoover Brothers, Inc.	1020 Oak St. Kansas City 6
NJ	Kevanire Mfg. Co.	10 Hillside Ave. Englewood
NM	J. Bauer Co.	700 Haines Ave. NW. Albuquerque
Pa	Kevanire Mfg. Co.	Commercial Trust Bldg. Philadelphia
Pa	G. T. Morse	2719 Phillips Ave. Pittsburgh 10
Tex	W. C. Hines Co.	305 N Austin St. Dallas 2
Utah	Bean-Knecht-Heimann Co.	400 W S S. Salt Lake City
Wash	G. A. Goddard Co.	4360 California Ave. Seattle 16

KEVANIRE SCIENTIFIC EQUIPMENT 2027 Logan St. Adrian, Mich

KEYSTONE CARBON CO. THERMOTOR DIV. St. Marys, Pa

Ariz	L. G. Snyder Co.	1410 N Highland Ave. Hollywood 38, Cal
Cal	L. G. Snyder Co.	1410 N Highland Ave. Hollywood 38
Ill	Knoblock & Meiner	1000 N Rockwell Ave. Chicago 18
Mass	Rosiewicz Eng. Sales Co.	221 Grove St. Braintree
Minn	R. W. Marshall Co.	6108 Excelsior Blvd. Minneapolis 16
NJ	D. R. Hines Co.	106 S Central Ave. Valley Stream, NY
NY	D. R. Hines Co.	106 S Central Ave. Valley Stream
Ohio	R. A. Lotsch	17115 Peardale Ave. Cleveland 11

KEYSTONE PRODUCTS CO. 956-4 23rd St. Union City, NJ

Fla	Geary Associates, Inc.	1051 Oak Ln. Orlando
NY	Vanderson Gartner Co.	Box 236, Livingston, NJ
NY	R. J. Marcy Associates	1776 Broadway, New York 19
Pa	Atlantic Associates, Inc.	600 Colonnade Bld. Phila. 11

KEYSTONE VALVE CORP. 5325 Kirby Dr. Houston, Tex

KEUFFEL & ESSER CO., INC., VALTER 327 Main St. Buffalo 9, NY

Can	W. Kittle & Co. of Canada Ltd.	1005 Bryntmawr Ave. NE. Royal, Montreal 18

KIBBLE APPARATE GmbH Villingen Schwarzwald, Ger

Aust	Dipl. - Ing. P. Mardhard	16, Linzergasse, Vienna VII
Belg	Electronique Geo S.P.R.L.	14, Rue Pere de Dolen, Brussels 4
Eng	Reflectro	7 Ulsom Pl. Richmond, Surrey
Fr	Peel	170, Rue de Courcelles, Paris 17ème
Neth	Ingenieursbureau Heijjen	Mauwerg 69, Gouvy
Swed	Svensks Aktiebolaget PHILIPS	46, Sveagatan, Stockholm 2
Switz	Standard Telephon & Radio AG	96, Zweierstr. Zurich 4

KIFFER TOOL & DIE INC. 5000 Tiffany Ave. Cleveland 2, Ohio

KILVOLT CORP. 250 High St. Rochester, NJ

Cal	R. L. Pflinger Co.	1000 Laurel St. San Carlos
Cal	Winder Dynamics	Box 1206, Sherman Oaks
Ill	L. P. Green & Co.	6015 W Diversey, Chicago 39
Mass	Kinse Engineering Sales	340 Walnut St. Newtonville
Minn	P. Lind Electronics	9301 Wenzer Ave. Circle Pines
Ont	Engineering Services Co.	6021 Yonge St. Toronto
NY	F & F Assoc.	418 Main St. North Port

KING LABORATORIES, INC. 127 Lake St. Syracuse 3, NY

KINGSLY VACUUM DIV. THE HY AN ARAKE CO. 1029 Washington St. Boston 35, Mass

Cal	K. Knight Co.	860 Jefferson St. San Francisco 11
Cal	Kinney Vacuum Div.	6000 Venice Blvd. Los Angeles 19
Ill	Kinney Vacuum Div.	17-10 S La Grange Rd. La Grange
Mich	W. A. Dolan, Inc.	8100 Roselawn Ave. Detroit 4
NJ	Kinney Vacuum Div.	1235 Admiral Wilson Blvd. Camden 11
NY	Kinney Vacuum Div.	50 Church St. New York 7
NY	Kinney Vacuum Div.	State Tower Bldg. Syracuse
Ohio	Kinney Vacuum Div.	500 E 200th St. Willowick
Pa	Heath Pump & Supply Co.	Brady & Sidney Sts. Pittsburgh 1
Tex	Kinney Vacuum Div.	2720 W Mockingbird Ln. Dallas
Tex	Gulf Engineering Co. Inc.	44 Dixie Dr. Houston 53
W Va	Heath Pump & Supply Co.	422 Quarrier St. Charleston

KIN TEL DIV. CONN ELECTRONICS, INC. 5725 Kearny Villa Rd. San Diego 12, Cal

Calif	Williams & Associates, Inc.	2285 S Albion St. Denver 22
Fla	Bevin & Caldwell	Box 7948, Orlando
Md	Herman Associates, Inc.	3006 W Cold Spring Ln. Baltimore 15
Mass	Technical Instruments, Inc.	99 Main St. Reading
Minn	Crawley Associates, Inc.	840 Raymond Ave. St. Paul
Mo	Harris-Hanser Co.	7010 Paseo Ave. Kansas City
NY	RMC Associates	350 E 79th St. New York 21
NY	J. D. Hyman Associates, Inc.	Box 1400, Syracuse
Pa	F. P. Sentlerf & Co.	18 West Ave. Wayne
Pa	H. E. Sandford Co.	5400 Clairton Blvd. Pittsburgh
Tex	A. Barnes Co.	3000 Lemmon Ave. Dallas 19
Wash	ARFA	1200 Prospect St. Seattle 98

KIP ELECTRONICS 1 Research St. Hartford, Conn

Cal	A. A. Dreese Co.	2010 E Florence, Huntington Park
Cal	R. Del Beccio & Assoc.	170 S Mayfair Ave. Daly City
Ill	R. T. Matthews & Co.	1400 N Halsted St. Chicago
Ind	R. T. Matthews & Co.	1227 Wells St. Fort Wayne
Mich	R. T. Matthews & Co.	17180 Gratiot Ave. Detroit
NY	J. Rich	155 N Jason St. Rome
Pa	Aqua Industries	Warminster

KITSON'S INSULATORS LTD. London Rd. Barking, Essex, Eng

Eng	Kitson's Insulators, Ltd.	Box 138, Leicester
Eng	Kitson's Insulators, Ltd.	Warrington, Lancs
Eng	Kitson's Insulators, Ltd.	4 Brinsley Rd. Sandiville, Bristol
Eng	Kitson's Insulators, Ltd.	80 Bexley Rd. St. Clements, Oxford
Eng	Kitson's Insulators, Ltd.	Wickham Rd. Fareham, Hants
Scot	Kitson's Insulators, Ltd.	499 Dobbies Lane, Glasgow, C. 4

KNAPP CONSTRUCTION CO., AGENCY 25-15 Borden Ave. LIC 1, NY

Md	A. Knapp Cons. Co.	Baltimore
Pa	A. Knapp Cons. Co.	Chester

KNAPP MILLS, INC. 23-15 Borden Ave. LIC, NY

Del	Knapp Mills, Inc.	Ft. of West St. Wilmington
NY	Knapp Mills, Inc.	970 Park Ave. New York

KOBE KOKYO CORP. 1-3 Wakayama-dori, Hyogo-ku, Kobe, Jap

Cal	U. S. Hudner Corp.	801 N Lake St. Burbank

KOLLMORGEN CORP. 347 King St. Northampton, Mass

Ariz	Cornillo & Co.	3740 E LoCienega Blvd. L A 34. Cal
Cal	Cornillo & Co.	3740 E LoCienega Blvd. Los Angeles 34
Ill	Carlton Electronic Sales	6077 N Northwest Hwy. Chicago 31
Minn	F. Peterson Co.	3401 Nicollet Ave. Minneapolis 6
Ver	Tolmin	Box No. 565, Plattsville, Mass

KONTI-KAGNER ELECTRIC CO. K. Mulcjan & Mulcjan, South Bend, Ind

Mich	Heinz & Ralph Associates	4705 Bellevue Ave. Detroit 7
NY	C. F. Sumell Co.	50 Park Ave. Bay Shore

KRANTZ LUFTTECHNIK G. Aachen-Brand, Ger

KROM-RITE CORP. 200 Rose Ave. Cambridge 39, Mass

Cal	Van Goes Co.	Box 455, Woodland Hills
Colo	Dunne Electronics	10400 Comal Ln. Denver 29
Ill	H. Meinhard & Co.	6000 Lincoln Ave. Chicago 45
Kan	Technical Sales Co.	6505 E Indianapolis, Wichita 7
Md	C. E. Snow Co.	4810 Wisconsin Ave. Bethesda
NY	MLR Associates	75 Tonney Ct. West Orange, NJ
NY	TM Associates, Inc.	Box 596, DeWitt (Syracuse)
Ohio	Electro Sales Associates	2014 E 200 St. Cleveland 19
Tex	Industrial Associated Electronics, Inc.	Box 10276, Dallas 7
Wash	Alinco	Boeing Field, Seattle 8
Can	Mel Sales Limited	1000 Avenue Rd. Toronto 12, Ont
Por	Rocke International Corp.	13 E 40th St. New York 16, NY

KRUEGER FABRICATING CO. INC. Box 1254, Madison 1, Wis

Mich	Brad & Don Dyl Associates	964 C.P.A. Bldg. Detroit
Ohio	W. S. Hayden Co.	14300 Detroit Ave. Cleveland

KUHLMANN ETS. 23 Bd. de l'Amiral Bruix, Paris 16ème, Fr

KULJAN CORP. 1300 N Broad St. Philadelphia 21, Pa

Cal	Kuljian Corp.	1355 Post St. San Francisco 9
DC	Kuljian Corp.	1001 Conn. Ave. NW. Washington 6

KULSA ELECTRIC CORP. 633 S Fulton Ave. Mt. Vernon, NY

Cal	R. A. Sommer Co.	1307 N Western Ave. Los Angeles
Ill	R. A. Hanks	5000 N Clybourn Ave. Chicago 16
Mass	C. Segal Co.	1340 Commonwealth Ave. Boston 34
Mich	ABH Sales Co.	10130 Puritan Ave. Detroit 38
Minn	R. G. Rogers, Inc.	1400 W Idaho Ave. St. Paul 4
Mo	R. W. Pertle Co.	400 W 34th St. Kansas City 3
NY	L. D. Allen Co., Inc.	115 Luther Ave. Syracuse 8
NY	The Pittsburgh Co.	420 S 5th Ave. Mount Vernon
Ohio	The Leckrone Co.	1200 Euclid Ave. Cleveland 11
Pa	L. Hubbs & Co.	1300 Fairmount Ave. Philadelphia 30
Tex	G. V. Pack Co.	130 East Linda Plaza, Dallas 10
Wis	Morris-Gartner Sales Corp.	1100 N 3d St. Milwaukee 3

KUNKLE VALVE CO. 111 S Clinton St. Fort Wayne, Ind

Cal	Bridgeporting & Power Equ. Co.	300 Beacon St. San Francisco 7
Cal	Valves Associates	9154 Dale St. Huntington Park
Colo	Denver Engineering Sales Co.	2421 S University Blvd. Denver 10
Ill	Lowden & Co.	5404 N Halsted, Chicago
Mich	Beam Specialties Co.	17704 Wyoming Ave. Detroit 30
Minn	Campbell Sowy Co.	1303 S 6th St. Minneapolis 4
Mo	W. F. Gladnick	6025 Delmar Blvd. St. Louis 30

NY	J. H. Pettinger Co.	4 Beekman St. New York 38
Tex	Equified Engineers, Inc.	1023 Hawaii, Houston
Tex	Equified Engineers, Inc.	4001 Belmont Ave. Dallas
Wash	W. A. Baker	1001 Westlake No. Seattle 9

KUPFERAN MFG., DIV NORDEN TECH PRODS., INC. 250 Main St., Hagaman, NY

Cal	Industrial Product Sales	1417 Georgia St. Los Angeles 15
Cal	Milligan-Spike	1435 Bayshore Dr. San Francisco 24
Ill	J. C. Angel & Co.	3740 W Peterson Ave. Chicago 45, Ill
Ind	J. C. Angel & Co.	3740 W Peterson Ave. Chicago 45, Ill
Md	E. Braddock	Box 668, Baltimore, Md
Mo	T. H. Ellis	7911 State Line, Kansas City
NJ	P. Kent Associates	W Dunkerce Rd. Mahwah
NY	P. Kent Associates	W Dunkerce Rd. Mahwah, NJ
Ohio	Reynolds & Associates	8400 E 13000 St. Cleveland
Pa	E. Braddock	Box 668, Haddonfield, NJ
Tex	Wyloney Sales Co.	Box 17970, Dallas

L J PRODUCTS 7454 Grand Ave. La Jolla, Cal

Ariz	Howe & Howe	Box 14405, Phoenix
Cal	Robeson-Thompson Assoc., Inc.	10015 Venice Blvd. Venice
Cal	Cornell & Associates	Box 816, Redwood City
Colo	Dunne Electronics	10000 Comal Ln. Denver 29
DC	Reinburg Associates	821 Investment Bldg. Washington 5
Ill	Ridgway Associates	6100 W North Ave. Chicago 39
Mass	Gordon & Co.	9 Prospect St. Waltham 54
Mo	Lodbrok Associates	P. O. Box 8407, Kansas City 14
NY	Conrad Associates	48 N Dean St. Englewood
Pa	L. C. Fuller, Jr.	30 Riverdrive Pl. Ardmore
Tex	Campion Sales Co.	4402 Chancellor Row, Dallas 35
Wash	F. H. Wright Co.	5010 Sandale Ave. Seattle 8

L & S MACHINE CO. INC. Box 317 R22, Latrobe, Pa

LAB CENTRAL de TELECOMMUNICATIONS 46 rue de Bretonell, Paris 6e, Fr

LAB PROF. DR. BESTMANN Gelsdorfer Str 22, Wiesbaden Schierstein Ger 327

Mex	Aeronica Corp.	940 Main St. Waltham 54
Aust	M. S. Dent E. G.	Johannesgasse 16, Vienna 1
Aust	Sales X-Ray Co. Pty. Ltd.	501 Macquarie St. Sydney, N.S.W.
Belg	Udinne Bolinne, S. A.	Rue de Ardale, Liege
Chin	Schmidt & Co. Ltd.	19-20 Chater Rd. Hong Kong
Den	Beck & Michelsen	Vestergade 22-26, Copenhagen
Eng	Gestell Sedlingtrol	Wrenyen Ln. Swanscoe, Middx.
Holl	Schaefer & Bolenberg	Van de Spiegelst. 4, 's-Gravenhage
Ire	Hudner Services	19 Court Street St. Dublin
Ital	A. Ghirardi, S.p.A.	Via Stenio, Mandello Lario, Como
Swed	Ing. J. Wendt	Stockholm
Swit	M. C. Meiner	Lowenr 55, Zurich

LABORATORY EQUIPMENT CORP. St. Joseph, Mich

Cal	Sonco Corp.	1000 S Seaside Beach Pl. Los Angeles
Colo	Bean-Knecht-Heimann Co.	4300 Holly St. Denver 27
Ill	Wilson-Anderson Co.	4800 W Division St. Chicago
Ky	E. Preiser Co., Inc.	Box 1005, Louisville
Mo	Chicago Apparatus Co. (Mo.)	5147 Bowen Ave. St. Louis 15
NJ	E. K. Sagner & Co.	38 Green Ave. Springfield
NY	Will Corp.	Rochester 3
Ohio	Hardwick Scientific	7401 E 77th St. Cleveland
Pa	A. H. Thomas Co.	3rd & Vine St. Philadelphia
Tex	W. H. Curtis & Co.	Box 118, Houston
Wash	Scientific Supplies Co.	600 Spokane St. Seattle 4

LABORATORY for SCIENCE 3401 College Ave. Oakland 18, Cal

LABORATORY FURNITURE CO. INC. 254 Conway Rd. Newark, NY

Cal	F. S. Richardson	821 N La Cienega Blvd. Los Angeles
Cal	K. Spilman, Jr.	110 New Montgomery St. San Francisco
DC	Graham & Van Loan Co.	1001 Wisc. Ave. NW. Washington
Ill	H. E. Wilson	4915 N Lincoln, Chicago
Kan	Howard/Arnold/Nordquist, Inc.	27 Southwest Blvd. Kansas City 8
Mass	J. F. Mentor	696 Commonwealth Ave. Boston
Minn	D. D. Phillips	Box 2, Adams
Minn	W. J. Mentor	5136 Lyndale Ave. S. Minneapolis
NY	P. H. Fischer	14 Park Ave. Rochester
Ohio	P. Reynolds	R-3 Berlyn Rd. 1717, Cleveland 07
Pa	Metal & Woodcraftsmen, Inc.	222 S 52nd St. Philadelphia 3
Tenn	E. Lancaster	Andrew Johnson Hotel-Knoxville

LABUN CO. 5401 S Packard Ave. Cudahy, Wis

Ala	Labun Co.	9 Office Park Birmingham
Cal	Labun Co.	6021 S Slauson Ave. Los Angeles
Colo	Labun Co.	1700 Broadway, Denver
Ill	Labun Co.	600 S Michigan Ave. Chicago
Minn	Labun Co.	2147 University Ave. St. Paul
NY	Labun Co.	80 E 42nd St. New York
Ohio	Labun Co.	607 Euclid Bldg. Cleveland
Okla	Labun Co.	Thompson Bldg. Tulsa
Tex	Labun Co.	1301 W Belt St. N. Houston
Pa	Labun Co.	2020 Grant Bldg. Pittsburgh
Wash	Labun Co.	314 Fairview Ave. N. Seattle

LAMBDA ELECTRONICS CORP. 515 Broadhollow Rd. Huntington, NY

Cal	Lambda Electronics Corp.	500 N Lake St. Pasadena
Mass	Lambda Electronics Corp.	215 Beaver Pond Rd. Medford

LAMB-AIR, INC. 1420 DYNALECTRON CORP. 3444 W Wilson Ave. Chicago 25, Ill

LAMBERT, Jr., & CO., S.S. 2020 Fifth St. Bakersfield, Ill

Cal	S. S. Lambert, Jr. & Co.	10125 W Washington Blvd. Culver City

LAMBS & CO., INC. ..... 45 W 45 St. New York 36, NY JUS-6646

LAMBERTS ELECTROMETER CO. 643 Sunset Ave. Glendale 1, Cal CHE-6837

LAPP INSULATOR CO. INC. .. 189 Sumner St. LeRoy, NY LE301
Cal S. S. Cowles Co. ..... 5400 Wilshire Blvd, Los Angeles DU7-3951
Cal D. S. Ingalls ..... 1405 Seyburn Blvd. San Francisco JUN-8002
Fla Bolsher & Associates ..... 8751 Atlantic Blvd. Jacksonville BA4-7811
Fla Bolsher & Associates ..... 61 NE 2nd St. Miami FR1-1700
Ill JBG Electric Co. ..... 6600 Northwest Hwy, Chicago NR1-6600
Mass J. Raine Co. ..... 60 Seyburn St. Boston HU2-0300
NY V. J. Brown Co. ..... 386 Elliott St. Bldg. Buffalo CL3300
NY Joseph & Cushing, Inc. ..... 111 Broadway, New York COT-0270
Ohio H. Fisher Assoc. ..... 7000 Euclid Ave. Cleveland UT1-0707
Tex E. B. Robertson, Inc. ..... 1350 Fleetwood St. Dallas WE2-3127
Wash C. F. James ..... 806 Lloyd Bldg. Seattle EL6811
Wis JBG Electric Co. ..... 1600 S 108th St. Milwaukee LD-7110

LARSON & SONS, INC., CHARLES E. 2645 N Kenlor Ave. Chicago, Ill SPE-0900

LARKE BOILER & ENGINEERING CORP.
3201 S Halsted Ave. Chicago 8, Ill. LAS-3900

LATROBE STEEL CO. ..... 1904 Buffalo St. Latrobe, Pa GE7-7701

LAWRENCE CO., INC., R.G. ... 136 Summit St. Tenafly, NJ LOB-3671
Ala Tower Equipment Co. ..... P.O. Box 5, Mower Island, Wash ADD-1400
Cal Oliver B. Lyman Co. ..... 66 New Montgomery St. San Francisco 5 ..... EU1-0440
Del Ward & Schaub, Inc. ..... 709 Bethlehem Pike, Whitemarsh, Pa CH7-0207
Ill Smith & Associates ..... 140 S Dearborn St. Chicago 3 ..... RA6-1821
Ohio R. J. Mueller & Associates ..... 108 E Mitchell St. Cincinnati 5 ..... PL1-0821
Pa G. R. Kepner Co. ..... 2721 Oliver Bldg. Pittsburgh
Pa Ward & Schaub, Inc. ..... 709 Bethlehem Pike, Whitemarsh CH7-0207
Tenn P. Gray ..... 140 Faun St. Knoxville 4-8646
Tex H. O'Neill & Son ..... Box 1368, Houston JA9-2010
Wash Tower Equipment Co. ..... P.O. Box 5, Mercer Island ADD-1400

LAWRENCE PUMPS, INC. ..... 371 Andover St. Lawrence, Mass 3-8149

LAYNE & BOWLER, INC. ..... Box 4687, Hollywood Sta. Memphis 8, Tenn BR5-7392

LEACH CORP. ..... 10826 Sunnow Rd. Compton, Cal NE6-1861
Cal Leach Corp. ..... 1302 Wilshire Blvd. Los Angeles 17 ..... HU2-9700
Cal Leach Corp. ..... 614 San Antonio Rd. Palo Alto YO6-4400
DC Leach Corp. ..... 1700 K St. Washington STD-1147
NY Leach Corp. ..... 405 Lexington Ave. New York 17 ..... TU6-5200
Ohio Leach Corp. ..... 223 W 1st St. Dayton 2 ..... BA3-0402
Wash Leach Corp. ..... 5 Airport Ave. Boeing Fld. Seattle 8 ..... PA5-0900
Swit Leach International, S.A. ..... Box 970, Zurich ZUR-10-00

LEAD FABRICATORS, INC. ..... 23 Ridgeway St. Kearny, NJ WY1-3200

LEAD PRODUCTS, INC. ..... Hartford Rd. Manchester, Conn MI3-7722

LEADER IRON WORKS, INC. ... 2710 N Jasper St. Decatur, Ill 423-7101

LECLANCHE S.A. ..... 48 Av. de Grandson, Yverdon, Switz

LEDEX, INC. ..... 123 Webster, Dayton 2, Ohio BA4-7891
Ala A. Plaugher, Jr. ..... 805 N 19th St. Birmingham 6 ..... VE5-1811
Cal C. R. Dobson, Associates ..... 1007 Laurel St. San Carlos LY3-3004
Cal Ledex, Inc. ..... 4001 1/4 Lennox Blvd. Los Angeles 6 ..... AX5-0303
Colo Hyde Electronics Co. ..... 600 S Lipan St. Denver 23 ..... WE5-3406
Ill Stephens-Adamson Sales, Inc. ..... 7300 W Armitage, Chicago 35 ..... TU8-5011
Mass K. C. Sawyer ..... 320 Bedford St. Lexington 73 ..... VO6-1303
Mo J. Lowrie ..... 10 Thorncliff Ln. Kirkwood 22 ..... TO6-0801
NJ Ledex, Inc. ..... 120 Degen Blvd. Ridgefield
Pa R. F. Clark Co. ..... 1400 Clark Bldg. Pittsburgh 22 ..... AT1-0900
Pa V. S. Hahn ..... Box 4007, Philadelphia 19 ..... VE5-0200
Wash D. Thompson ..... Tacoma, Boeing Fld. Seattle 8 ..... PA8-0900
Wis E. A. Dickinson & Associates ..... 4177 N Grandview Ave. Milwaukee 9 ..... CO4-1400

LEDGER & CO. ..... 229 Alfred Ave. Teaneck, NJ TE3-7900

LEE ASSOCIATES, INC. ..... 406 McCarty Bldg. Boise, Idaho 2-8861
Wash V. H. Wilson ..... 6016 Fauntleroy, SW, Seattle WE5-6675
Can Leybold Nachfolger Anlagen GmbH Kaiser St. 164, Cologne

LEEDS & NORTHRUP CO. ..... 4936 Stenton Ave. Philadelphia 44, Pa. ... BA8-6900
Cal Leeds & Northrup Co. ..... 1330 Monterey Pass Rd. Monterey Park AN8-3101
Cal Leeds & Northrup Co. ..... 1095 Market St. San Francisco 3 ..... MA1-3401
Ga Leeds & Northrup Co. ..... 3001 Grandview Ave. NE, Atlanta 5 ..... CE7-8884
Idaho Leeds & Northrup Co. ..... 455 E 4th S, Salt Lake City 11, Utah DA8-0861
Ill Leeds & Northrup Co. ..... 307 N Michigan Ave. Chicago 1 ..... CE8-2400
Iowa Leeds & Northrup Co. ..... Apt. 504 Walnuts Vlge. Des Moines 15 ..... CH8-0801
Mo Leeds & Northrup Co. ..... 1045 Gleason Pl. Kansas S. City AC2-1000
NY Leeds & Northrup Co. ..... 111 3rd Ave. New York 17 ..... MU7-4130
Ohio Leeds & Northrup Co. ..... 1008 E 107th St. Cleveland 6 ..... SW3-3180
Pa Leeds & Northrup Co. ..... Fort Washington MO6-5600
Tenn Leeds & Northrup Co. ..... 3001 Grandview Ave. NE, Atlanta 5, Ga CE7-8884
Wash Leeds & Northrup Co. ..... 1011 Republican St. Seattle 9 ..... MA3-0303

LEEDS & NORTHRUP LTD. ... Broad St. Birmingham 19, Eng MIDDY-4

L'ELECTRONIQUE APPLIQUEE 20 rue de Bourne Fisher, Paris 15, Fr AL8-16-20-21
Belg Gammatec ..... 81, chaussee de Charleroi, Bruxelles
Ger Herbert Gmbh ..... 6-8 Bornemann - Hamburg-Altona
Neth Cosco ..... Oldenzaal - 20 - Rotterdam
Port Sonel ..... Rua de S. Filipe Nery - 20 - Lisboa 1

LENOX INSTRUMENT CO. .... 3850 Chancellor St. Philadelphia 3, Pa ... LO8-6602

LEPEL HIGH FREQUENCY LABS
54-18 37th Ave. Woodside, NY RA6-6300

LERMA ENGINEERING CORP. 33 Clark Ave. Northampton, Mass 584-7856

LEYBOLD HOCHVAKUUM ANLAGEN Bonn/Br. 304, Bonn, Germany
Bras MBC Equipamos Corp. ..... 149 Cinelandia St. Newton Highlds. 48
Arg Guillermo Keller ..... Casilla Correo 4393, Buenos Aires
Aus Transtal & Co. KG ..... Innrain 52, Innsbruck
Bel Office Commercial Technique ..... 96 Chaussee de Haecht, Bruxelles
Fr Jean-Jacquin ..... 18 Rue Pierre Curie, Paris
Ital Leybold-Chimar S.p.A. ..... Pero, 4132, Milan
Jap C. Cowan & Co. Ltd. ..... Kio, Chiyoda-Ku, Tokyo
Swed Bergman & Beving ..... 3-Chome Ochiai-Cho
Swit Willy Bender ..... Kartrvagen 76, Stockholm 19
Switz Bender 2, Zurich, Via Postal, 58 Inc.

LEYLAND PAINT & VARNISH CO., LTD.
Leyland, Lancs, Eng LE7148
Eng Leyland Paint & Varnish Co., Ltd. 75 Newman St. London MU9016
Eng Leyland Paint & Varnish Co., Ltd. 68 Bucks Rd. Douglas, Isle of Man 0629
Eng Leyland Paint & Varnish Co., Ltd. 102 County Rd. Walton, Liverpool AI1800
Eng Leyland Paint & Varnish Co., Ltd. 69-69 Bridge St. Manchester BLF100
Eng Leyland Paint & Varnish Co., Ltd. 70 King Hill, Sheffield 3 24179
Eng Leyland Paint & Varnish Co., Ltd. 320 Corporation St. Birmingham 4 ..... CEN697
Eng Leyland Paint & Varnish Co., Ltd. 7 Gallowgate, Newcastle-On-Tyne 27705
Ire Leyland Paint & Varnish Co., Ltd. 42 Queen St. Belfast 23948
Scot Leyland Paint & Varnish Co., Ltd. 10 & 20 Gloucester, Edinburgh 1 ..... CA1454
Scot Leyland Paint & Varnish Co., Ltd. 88-92 York St. Glasgow CE3661
W Leyland Paint & Varnish Co., Ltd. 135-139 Merrye St. Llandaiff, S Wales 73514
W Leyland Paint & Varnish Co., Ltd. 55 St. Mary St. Cardiff, S Wales 29976

LIBRASCOPE DIV.GEN PRECISION INC. Glendale 1, Cal CH-6541
Ala Librascope Div. of GPI ..... 8800 S Memorial Pkwy. Huntsville JU5-6322
DC Librascope ..... 777-14th St. NW, Washington ST5-9797
Ohio Librascope Div. GPI ..... 333 W 1st St. Dayton 2 ..... BA5-9400
Tex Librascope Div. of GPI ..... 2800 N Central Expwy. Dallas 6
Wash R. C. Power Co. ..... 1309 Poplar Pl. S, Seattle 44 ..... EA5-8886
Can A. V. Roe Ltd. ..... 45 Elgin St. Ottawa 4 ..... CE4-6172

LIBBEY-OWENS-FORD GLASS CO. 811 Madison Ave. Toledo, O

LIBBY-OWENS-FORD GLASS CO. INC. 400 West Ave. Rochester, NY

LIGHTSTONE IMPORT CO. ..... Box 45, Gracie Sta. NY 28, NY YU6-4339
Neth Lightstone Works ..... Maastricht, Age 102, Ter Apel

LINCOLN ELECTRIC CO. LTD. Shock Fan Rd. Vickrya Gdn. City, Bucks. Eng WEL24000

LINCOLN FOUNDRY CORP. ..... 2325 E 49 St. Los Angeles, Cal LU8-0121

LIND INSTRUMENTS, INC. ..... 2204 Aloe St. Mountain View, Cal YU8-0884
Cal The Thomas Co. ..... 7202 Melrose Ave. Los Angeles 46 ..... WO6-1121
Ill Dean Assoc. ..... 37 Hoey St. Mundelein LD-0870
Wash The Thomas Co. ..... 1707 10th Ave, Seattle 44 ..... EA6-0900

LINDBERG ENGINEERING CO. 2600 W Hubbard St. Chicago 12, Ill HU6-3440
Cal Lindberg Engineering Co. ..... 12207 S Sepulveda Ave. Downey OR2-1207
Ind Lindberg Engineering Co. ..... 320 E Ohio St. Indianapolis 4 ..... ME5-4474
Mich Lindberg Engineering Co. ..... 1230 S Woodward Ave. Royal Oak JU6-3133
Mich Lindberg Engineering Co. ..... 1716 Kingston Ave. Kalamazoo SP3-1207
Mo R. S. Stephens Machinery Co. ..... 6345 Olive Blvd. St. Louis 30 ..... WY1-0542
NY Lindberg Engineering Co. ..... 450 Lexington Ave. New York 17 ..... OR9-8750
Ohio Lindberg Engineering Co. ..... 1414 Victoria Ave. Cleveland 7 ..... AC1-5878
Pa Lindberg Engineering Co. ..... 2700 W Chester Pike, Newton Square EL6-0900
Pa Lindberg Engineering Co. ..... 345 Mt. Lebanon Blvd. Pittsburgh 34 ..... LO1-5686
Wis Lindberg Engineering Co. ..... 9237 W Lisbon Ave. Milwaukee 22 ..... HO5-9460

LINDE CO. DIV. UCC ..... 270 Park Ave. New York 17, NY LL1-3345

LINE MATERIAL INDUSTRIES,
McGRAW-EDISON CO. ..... Milwaukee 1, Wis BR2-8777
Ala Line Material Industries ..... 1700 Vanderbilt Rd. Birmingham 1 ..... FA5-1051
Cal Line Material Industries ..... 7165 S Paramount Blvd, Pico Rivera RA8-0831
Cal Line Material Industries ..... 500 Shaw Rd. South San Francisco PL5-0800
Ga Line Material Industries ..... 1901 Chamberlain Ave. NW, Atlanta ST4-7005
Ill Line Material Industries ..... 4700 Lake St. Melrose Park FM-5070
Mass Line Material Industries ..... 370 Revere Beach Pkwy. Revere AT4-0340
Me Line Material Industries ..... 1001 Bedford, North Kansas City 16 ..... GR1-4000
NY Line Material Industries ..... 100 Church St. New York 7 ..... CO7-9700
Ohio Line Material Industries ..... 800 Euclid Ave. Cleveland MA1-7000
Tex Line Material Industries ..... P.O. Box 16045, Dallas 7 ..... EF1-0841
Wash Line Material Industries ..... 3000 W Nickerson St. Seattle 99 ..... AT3-0900

LINE DIV. GEN. PRECISION, INC. Stamford, NY BA5-1811
Cal Link Div.-Gen. Precision, Inc. 620 University Ave. Palo Alto DA6-2770
Cal Link Div. Gen. Precision, Inc. 3451 California Ave. Palo Alto DA6-2770
DC Link Div. Gen. Precision, Inc. 1314-14th St. NW, Washington 5 ..... EX3-4013
Ohio Link Div.-Gen. Precision, Inc. 333 W 1st St. Dayton BA5-0371
Utah Link Div.-Gen. Precision, Inc. 2000 Texas St. Salt Lake City 6 ..... HU5-0547

LIONEL ELECTRONIC LABS. 1235 Flushing Ave. Brooklyn 37, NY EV6-8715
Cal West Coast Sls. & Serv. Co. ..... 970 40th St. Oakland 10 ..... TN1-4000
DC The Lionel Corp. ..... 405 15th St. NW, Washington 4 ..... EX3-1300
Fla Cal-Sin-Co. Inc. ..... 5700 Precision Dr. Orlando CH1-1501
Mich R. Z. Sales Co. ..... 15400 Fenkell Ave. Detroit UN4-4000
Ohio A. W. Korn ..... 535 E Grand Ave. Springfield FA2-6003
Tex Geophysical Supply ..... 1500 Crawford St. Houston CA4-1021
Wash Instrumentation Eng. Co. & Serv. Co. 1203 3rd Ave. Seattle 1 ..... MA3-4000
Can Bach Electronic Sales, Ltd. ..... Box 540, Ajax, Ont AJ126
Eng T. J. Sim & Sim, Ltd. ..... 299 Regent St. London W1
Ger E. H. Stein ..... Zeil 133, Frankfurt/Main
Ital Apparecchi Clark-Fry Elettronica
Ravenglade 132, Schwenningen
Pak Lautsmeter Cosmic Corp. Ltd. .. Bunder Rd. Karachi, Pakistan

LIQUID CARBONIC DIV. GENERAL DYNAMICS CORP.
135 S La Salle St. Chicago 3, Ill FI6-8181
Cal General Dynamics Corp. ..... 147 Industrial Rd. San Carlos LY1-0153
Ga General Dynamics Corp. ..... 740 McDaniel St. SW, Atlanta MU8-0006
Ill General Dynamics Corp. ..... 4400 W 48th St. Chicago HY5-0900
Ill General Dynamics Corp. ..... 630 Washington Ave. Belleville FL3-1200
Ohio General Dynamics Corp. ..... 1318 W 10th St. Cleveland AT1-0009
Pa General Dynamics Corp. ..... Front & Porter Sts. Philadelphia HO6-8900

LIQUID METALS, INC. ..... Box 2055, Hartford, Conn 527-0802

LITHIUM CORP. OF AMERICA, INC. ..... 250 5th Ave. New York 36, NY OR5-6940
Cal Lithium Corp. of America, Inc. 650 Shorts Pl. Los Angeles 5 ..... DY5-5161
Ill Lithium Corp. of America, Inc. 510 LaSalle, Wacker Bldg. Chicago 1 ..... DE6-0616
NC Lithium Corp. of America, Inc. Box 4001, Bessemer City EU9-2200
Ohio Lithium Corp. of America, Inc. 1104 Huron Bldg. Cleveland 14 ..... DE1-0842

LITTELFUSE, INC. ..... 1865 Miner St. Des Plaines, Ill VA6-1100
Cal W. J. Purdy Co. ..... 312 7th St. San Francisco UN3-3300
Cal A. M. Wood Co. ..... Box 1158, Arcadia CU3-1301
Ga F. C. Hickman Co. ..... 456 Medlock Rd. Decatur MU6-2700
Ind L. DeFoe Co. ..... 5600 Washington Blvd. Indianapolis AT3-1205
Mass C. Segal Co. ..... 1380 Commonwealth Ave. Boston 36 ..... BC3-4304
Mich R. C. Merchant Co. ..... 18611 W McNichols, Detroit KE3-0000
Mo W. E. Fry & Co., Inc. ..... 400 W 34th St. Kansas City 11 ..... JE1-0806
NY R. W. Mueller Co., Inc. ..... 407 Ellicott Sq. Bldg. Buffalo 3 ..... WA5817
NY S. H. Bass ..... 70-15 Fleet St. Forest Hills 75 ..... BO6-0101
Ohio Neal Bear Co. ..... 8400 Snowdown Rd. West Richfield OL8-3321
Pa E. A. Jeffries ..... 105 Furnace Ave. Narberth MD4-0500
Wash D. M. Lee Co. ..... 5017 Sud Ave. Seattle 9 ..... MA5-0523

LITTON ENGINEERING LABS. Box 949, Grass Valley, Cal 273-6376

LITTON INDUSTRIES ..... 336 N Foothill Rd. Beverly Hills, Cal CR4-7411
Cal Litton Electron Tube Division ... 409 Industrial Rd. San Carlos LY1-0411
Cal Litton Ind. Components Co. ..... 241 N Foothill Rd. Beverly Hills TR9-1279
DC Litton Systems, Inc. ..... 1435 I St. NW, Washington 6 ..... EX3-4681
Mass Litton Systems, Inc. ..... 831 Crescent St. Waltham TW4-0000
NY Litton Systems, Inc. ..... 44 Beaches Village, Bronx FR6-0010
NY Western Ind. Div. ..... 440 W 55th St. New York 19 ..... JU5-0000
NY Litton Systems, Inc. ..... 275 Park Ave. New York PL9-0000
Ohio Litton Systems, Inc. ..... 333 W 1st St. Dayton 2 ..... BA5-3005
Can Litton Systems, Inc. ..... 105 Sparks St. Ottawa, Ontario CE3-0040
Ger Litton Systems GmbH ..... Munich 15 592190
Swit Litton World Trade Corp. ..... Box 2764, Zurich 39 32-56-40

LOCK & CO., LTD. A. H. ..... Hatton St. Birkins, Lancs, Eng
Eng A. H. Lock & Co., Ltd. ..... Hawkesbury Rd. Saltbell, Wor.
Eng A. H. Lock & Co., Ltd. ..... 68 Cumberland Rd. Bromley, Kent.

LOCKHEED AIRCRAFT CORP. Box 551, Burbank, Cal TR7-2711
Ala Lockheed Aircraft Corp. ..... 3013 Memorial Pkwy. S, Huntsville JE6-0727
Cal Lockheed-California Co. ..... Box 551, Burbank TR7-2711
Cal Lockheed Aircraft Service, Inc. Ontario Intl. Airport, Box 35, Ontario YU6-1234
Cal Lockheed Missiles & Space Div. Box 504, Sunnyvale RE5-4321
DC Lockheed Aircraft Corp. ..... 1000 Conn Ave. NW, Washington 6 ..... MEO-1700
Ga Lockheed-Georgia Co. ..... Marietta MA9-3411
Mass Lockheed Aircraft Corp. ..... Box 504, Lexington VO2-6400
Neb Lockheed Aircraft Corp. ..... Box 787, Bellevue BE1415
NJ Lockheed Electronics Co. ..... Plainfield PL7-1000
NY Lockheed Aircraft Corp. ..... 405 Lexington Ave. New York 17 ..... OX7-7171
Ohio Lockheed Aircraft Corp. ..... 122 N Ludlow St. Dayton BA3-5135

LOCKHEED AIRCRAFT CORP.
GEORGIA DIV. ..... 1200 Seventh Ave. NW, Atlanta 18, Ga ST3-2575
Ala Lockheed Aircraft Corp. ..... Holiday Office Center, Huntsville JE6-0727
Cal Lockheed Aircraft Corp. ..... 1056 N Hollywood Way, Burbank TR7-2711
Cal Lockheed Aircraft Corp. ..... Box 504, Sunnyvale RE5-4321
DC Lockheed Aircraft Corp. ..... 1000 Connecticut Ave. NW, Washington 6 ..... MEO-1700
NY Lockheed Aircraft Corp. ..... 405 Lexington Ave. New York 17 ..... OX7-7171
Wash Puget Sound Bridge & Dry Dock Co. 2000 10th Ave. SW, Seattle 4 ..... MA5-3072
Can Colley Crane & Manufacturing, Ltd. 88 Sumer, New Westminster, B.C. LA4-0844
Swit Lockheed Aircraft Corp. ..... 7-9 Rue de Conseils, Geneva 32-51-15

LOCKWOOD GREENE ENGINEERS INC. 41 E 42nd St. New York 17, NY MU7-4600
Mass Lockwood Greene Engineers, Inc. 316 Stuart St. Boston 16
SC Lockwood Greene Engineers, Inc. Montgomery Bldg. Spartanburg

LOFTUS CORP. PETER F. ..... Pittsburgh Bank Bldg. Pittsburgh 22, Pa EX1-2200

LOGAN EMERGENCY DOORS, INC. 120 N Garfield Ave. Glendale, Cal CH-7261
Cal Logan Manufacturing Co. ..... 3000 Ridgeway Blvd. Sausalito
Fla E. L. Webbe Co. ..... 875 100th Ter. NE, N Miami Beach
Ill Bunch Equipment Co. ..... 407 S Dearborn St. Chicago 10
Md W. J. Dunn ..... 100 Oak St. Baltimore 20
Mass Pioneer Sales Co. ..... 120 Mortimer St. Boston 14
Mich D. T. Rendall & Co. ..... 629 Livernois Ave. Detroit
NY F. U. Sylvester ..... 340 E 39th St. New York 16
Pa J. L. Campbell Co. ..... 709 Bethlehem Pike, Philadelphia 19
Pa Siegel & Sweeney Co. ..... 606 Center Ave. Pittsburgh 19
Tex A. A. Sterling, Jr. ..... 5811 Crocker St. Houston 6
Va W. Jennings Griggs ..... 4807 Colley Ave. Norfolk 8
Wis G. Washington & Associates, Inc. 4517 N Prospect Ave. Milwaukee

LOGAN MACHINE MFG. CO., INC. 134 E 22 St. New York, NY GR5-6470

LOGO MANUFACTURING CO. 1400 N 12th St. Erie, Pa GL5-6571
Cal Leof Mfg. Co. ..... 7040 Hollywood Blvd. Los Angeles 28 ..... HO6-7168
Cal Leof Mfg. Co. ..... 910 Kearny St. San Francisco 11 ..... EX7-0800
Fla Leof Mfg. Co. ..... 1355 E Morse Blvd. Winter Park MI7-5661
Ga Leof Mfg. Co. ..... 3131 Maple Dr. Atlanta 5 ..... CE7-9547
Ill Leof Mfg. Co. ..... 659 N Michigan Ave. Chicago 11 ..... MO8-0014
Mass Leof Mfg. Co. ..... Sales Office Bldg. Boston 16 ..... HA6-9186

Mich Leef Mfg. Co. ..... 19801 James Couzens Hwy. Detroit 35 ..... DI1-4041
Mo Leef Mfg. Co. ..... 400 W 36th St. Kansas City 11 ..... WE10-1393
NJ Leef Mfg. Co. ..... 206 S Mall, Paramus DE9-3300
Ohio Leef Mfg. Co. ..... 340 W 1st St. Dayton 9 ..... BA4-0262
Pa Leef Mfg. Co. ..... 1400 Walnut St. Philadelphia 9 ..... PE5-3560
Tex Leef Mfg. Co. ..... Gilbreter Life Bldg. Dallas 1 ..... RI1-2002

LORRAINE-ESCAUT ..... 7 Rond-Point Rapsael, Paris 16, Fr PARIS-20

LORENS STEEL CO. ..... 471 Lorens Bldg. Centerville, Pa 984-4330
Cal Lorens Steel Co. ..... 470 Huntington Dr. San Marino SY9-9790
Ga Lorens Steel Co. ..... 1889 Boydens Hwy. Darlington YE9-3560
Ill Lorens Steel Co. ..... 200 S Michigan Ave. Chicago 4 ..... WE2-3900
Mass Lorens Steel Co. ..... 50 Providence St. Boston 16 ..... BU2-4021
NJ Lorens Steel Co. ..... 160 Halsted St. East Orange OR6-8000
NY Lorens Steel Co. ..... 11 N Pearl St. Albany 7 ..... HE4-2107
NY Lorens Steel Co. ..... 4440 Main St. Buffalo 26 ..... CE2977
Ohio Lorens Steel Co. ..... 1700 Section St. Cincinnati 27 ..... RI3-5441
Ohio Lorens Steel Co. ..... 55 Public Sq. Cleveland 13 ..... MA1-0110
Pa Lorens Steel Co. ..... 459 4th Ave. Pittsburgh 19 ..... GR1-1487
Va Lorens Steel Co. ..... 1810 Crystal Wall, South Bldg. Richmond 19 ..... MO6-8816

LUNATRON ELECTRONICS, INC. ..... 116 County Courthouse Rd. New Hyde Park, NY PO-2280
Cal Instruments for Measurements ..... 3444 Glendale Blvd. Hollywood 39 ..... HO6-7204
Ga E. G. Holmes & Associates ..... 4679 Roswell Rd. NE, Atlanta 9 ..... BL6-2800
Ill W. P. Marsh & Associates, Inc. ..... 344 Chicago Ave. Oak Park EU6-5900
Md Engineering Associates ..... 2235 Maryland Ave. Baltimore 18 ..... HO7-1900
Mass George Greenfeldt & Associates ..... 230 Boston Hill Rd. Waltham 54 ..... TW4-5000
NJ Central Associates ..... 44 N Dean St. Englewood LO6-0008
NY Charles A. Wunsch Co. ..... 1446 Valencia Rd. Schenectady 9 ..... ED3-2500
Pa Baldwinth & Co. ..... Box 71, Landover MA8-0900
Tex Wallace Associates ..... Box 12035, Dallas 30 ..... FL7-7080
Wash Peacock ..... 6110 20th NW, Seattle HU4-0007
Can Instronics Limited ..... Box 100, Stittsville, Ont TA9-1300
Per Terminal Radio Intl. Ltd. ..... 540 W 17th St. New York 11, NY CH9-0500

LUNDELL & CO. ..... 7730 Stony Island Ave. Chicago 49, Ill ZA-3000
Ariz R. E. Carlson Co. ..... 5050 N 3rd Ave. Phoenix WO-0005
Cal Lynch Equipment Co. ..... 2000 College Ave. Oakland OL6-0170
Fla W. Bergman ..... Box 4015, Miami 1 ..... BR-5661
Ill Epco Services ..... 600 E Northwest Hwy. Mt. Prospect CL9-2000
Kan G. Haynes Co. ..... 7501 Mission Rd. Prairie Village MH-2000
Mass Bemco-Funk, Inc. ..... 497 Cherry St. West Newton 65 ..... WO9-0000
Ohio R. E. Sulzamp Co. ..... P. O. Box 94, Cincinnati 42 ..... TW1-1800
Ohio S. J. Verob ..... 4630 E 90 St. Garfield Hgts. 25 ..... YU2-0500
Pa Lance Eng. Sales Co. ..... 22nd & Arch, Philadelphia 4 ..... EV8-0835
Tex R. Wright Co. ..... 4800 N Central Expwy. Dallas 4 ..... TA4-0710
Can Associated Instr. & Gas. ..... 2000 Bone St. Montreal 26 ..... HU4-1107

LUTHER MERRY CO. ..... Box 2191, Toronto 7, Ont EM2-4131
Ill A. J. Cox & Co. ..... 801 N Princeton Ave. Arlington Hts.
Tex R. C. Foltz Co. ..... 1521 Welch St. Houston 19

LYDON BROS., INC. ..... 55 Lakeside St. Hackensack, NJ

McDONNELL AUTOMATION CENTER ..... Box 516, St. Louis 66, Missouri PE1-2121

MCINTOSH EQUIPMENT CORP. WALKER, CROWELLER DIV. ..... 17-19 Park Row, New York 38, NY

McLAIN ROSKEN ASSOCIATES ..... 931 Abe Pl. Downers Grove, Ill

McPHAR-ROBERTS LTD. ..... 139 Bond Ave. Don Mills, Ontario HA4-4451

M.B.L.E. ..... 80 Rue des Deux Gares, Brussels 7, Belg 12/21.12.80

M&C NUCLEAR PRODUCTS GROUP, METALS & CONTROLS INC. DIV. TEXAS INSTRUMENTS INCORPORATED ..... Box 896, Attleboro, Mass.

MSA RESEARCH CORP. ..... Cedbury, Pa 2010

M. TEN BOSCH, INC. ..... 80 Wheeler Ave. Pleasantville, NY BO9-3000
Cal Dynamic Balancing Co. ..... 7260 Lankershim Blvd. North Hollywood PO6-0881
DC Tomco International Corp. ..... 1835 Connecticut Ave. Washington 9 ..... DU7-1050
Tex Engineering Associates Inc. ..... Fort Worth

MACE IRON WORKS CO. ..... Warren & Water Sts. Sandusky, Ohio MA6-2712

MACKAY, INC., A.D. ..... 170 Broadway, New York 38, NY BA7-4222

MADDVELL CO. INC. ..... 301 Congress St. Boston 10, Mass. LI3-0725

MAGNAFLUX CORP. ..... 7300 W Lawrence, Chicago 31, Ill ES7-3000
Cal Metal Control Labs. ..... 2705 E Slauson Ave. Huntington Park LU6-4181
Cal Magnaflux Corp. ..... 5600 S Garfield, Los Angeles RA3-0061
Mich Magnaflux Corp. ..... 2777 E Grand Blvd. Detroit 11 ..... TO3-4040
NY Magnaflux Corp. ..... 55 W 42nd St. New York 36 ..... BR9-1710
Ohio Magnaflux Corp. ..... 5013 Prospect Ave. Cleveland HE3-0727
Pa Magnaflux Corp. ..... 6161 Brownsville Rd. Pittsburgh 36 ..... TU5-3440
Tex Magnaflux Corp. ..... 2033 Manor Way, Dallas 35 ..... FL8-2884

MAGNATRAN, INC. ..... 240 Schuyler Ave. Kearny, NJ WY3-4600
Md Dickens Sales Co., Inc. ..... 107 York Rd. Towson VA5-0800
NJ Dickens Sales Co., Inc. ..... 500 Marlton Pike, Elton HA5-4000
Tex J. A. Green Co. ..... 7110 Envoy Ct. Dallas 7 ..... MI7-7450
Tex J. A. Green Co. ..... 5400 Montrose Blvd. Houston JA4-2900

MAGNETIC INSTRUMENTS CO., INC. 437 Commerce St. Thorsward, NY 609-4312
Cal Wright Engineering Co. ..... 100 E California Blvd. Pasadena MU3-0202
Cal Wright Engineering Co. ..... 150 50th Ave. San Mateo FO-3137
DC Jodrey Associates ..... 8007 Lenier Dr. Silver Spring, Md JU8-7000
Fla G. C. Equipment Sales ..... 416 N Orange Ave. Orlando

Ill Automation Engineering Co. ..... 2401 W Donna Dr. Milwaukee
Md Jodrey Associates ..... 8007 Lenier Dr. Silver Spring JU8-7000
NY W. I. Sensen Co. ..... 884 Englewood Ave. Buffalo AT7-010
Pa Maintenance Engineering Co. ..... P. O. Box 548, Cheyenne, Del ST9-0101
Tex Gay Sales Co. ..... 400 Sol Ross, Houston UN1-0030
Wis Automation Engineering Co. ..... 2407 W Donna Dr. Milwaukee
Can Ballistics, Ltd. ..... 6000 Maynard St. Montreal 9 ..... HU-0017
Eng Scientific Foundings, Ltd. ..... Poynton Cheshire

MAGNETIC SHIELD DIVISION PERFECTION MICA CO. ..... 1322 N Elston Ave. Chicago 22, Ill TW4-2122
Ariz Perfectch Elec. Assoc. ..... 3400 E Thomas Rd. Phoenix AM4-4004
Cal Perfectch Elec. Assoc. ..... 6400 Engineers Rd. San Diego BR6-8500
Cal Perfectch Elec. Associates ..... 6007 W Washington Blvd. Los Angeles WE1-1041
Cal Perfectch Elec. Associates ..... 341 Cincinnati St. Palo Alto DA1-3684
Conn Albert Allens Co. ..... Box 407, Meriden WE7-2021
Fla RCRA, Inc. ..... 6815 Madeira Beach, St. Petersburg WA1-9785
Md D. Jones ..... 31 E 21st St. Baltimore HA-6178
NJ Reader Associates ..... 4000 Bergenline Ave. Union City UN4-0077
NM Perfectch Elec. Assoc. ..... 2745 San Mateo, NE, Albuquerque AM6-0797
Tex Mackie Smith Co. ..... P. O. Box 30215, Dallas FL1-1015
Wash Instronics, Inc. ..... 1207 Norman St. Seattle EA8-0565
Can R. E. Griffith ..... 465 St. Stephen Ave. Westmount, Mont, Que WE9-1107

MAGNETROL, INC. ..... 2193 S Marshall Blvd. Chicago 23, Ill BU-4000
Cal Crown Berkely ..... 5420 Riverside Dr. Los Angeles 29 ..... NO6-1221
Colo E & M Equipment Co. ..... 2455 - 16th St. Denver
DC McLaney Engineering Co. ..... 800 Mills Bldg. Washington ST7-0200
Ga L. M. Crowe Co. ..... 112 Tumbo Terr. NW, Atlanta CE7-2000
Ill Moses & Controls ..... 444 N Lasalle St. Chicago 10 ..... WH6-1400
Mass Cadmous Steam Specialty Co. ..... 63 Rainey Mach. Boston 10 ..... HA6-0407
NY Energy Control Co. ..... 5 Beekman St. New York 38 ..... BA7-0407
Tex Steel Engineering Products Co. ..... 1006 E Side Rd. El Paso MU2-0276
Tex Industrial Equipment Co. ..... 6001 Hedgerton Blvd. Houston 11 ..... WA6-5401
Tex Eggelhof Engineers ..... 4202 Belmont Ave. Dallas TA4-2205
Wash Bodeson-Hamps Co. ..... 1743 1st Ave. S. Seattle 4 ..... MA3000

MAGNI S.p.A. ..... Via L. Magini 7, Bergamo, Ital 35.644
Belg Continsa ..... 90, Ave. Louise, Bruxelles 343590
Egypt Handel Gomaa ..... 2, Chawarbi St. Cairo
Fr E.M.F. ..... 10, Rue Pasteur Bois-Colombes (Seine) MAG1-05
Ind Exam Engineering Co. Ltd. ..... Box 55, Madras 1
Ital Magini S.p.A. ..... Via Valcamonica Pavesi, 71, Milano 588.3541
Pak Steel ..... Box 1216, Lahore
Spa Casanova ..... Av. de Jose Antonio, 7, Madrid
Tug Jabrex ..... Box 917, Bangkok

MAIN, INC., CHARLES T. ..... 80 Federal St. Boston 10, Mass HA6-4380
NC C. T. Main, Inc. ..... 230 W Tonde St. Charlotte 5 ..... FR6-1707

MALAKER LABS. INC. ..... 191 Mill Ln. Westbrooklin, NJ AD2-4954

MALLINCKRODT CHEMICAL WORKS ..... 2nd & Mallinckrodt Sts. St. Louis 7, Mo CE1-0800
Cal Mallinckrodt Chemical Works ..... 3010 E 44th St. Los Angeles 58 ..... LU8-3207
Ill Mallinckrodt Chemical Works ..... 307 N Michigan Ave. Chicago 1 ..... ST2-1400
NY Mallinckrodt Chemical Works ..... 72 Gold St. New York 8 ..... WO4-4000
Ohio Mallinckrodt Chemical Works ..... 1655 Vernon Pl. Cincinnati 10 ..... AV1-1841
Can Mallinckrodt Chemical Works, Ltd. ..... 470 St. Paul St. W, Montreal 1, Que VU9-0225
Can Mallinckrodt Chemical Works, Ltd. ..... 1070 Castlefield Ave. Toronto 19, Ont RU8-1100
For Mallinckrodt Chemical Works ..... 72 Gold St. New York 8 ..... WO4-4000

MANCO MFG. CO. ..... Bradley, Ill WE1-8231
Ala F. Middleton Co. Inc. ..... 1207 Cahaba Rd. S, Birmingham 13 ..... TU9-0417
Cal J. A. Schnoler Co. ..... 600 Sunset Blvd. Los Angeles 50 ..... HO7-0060
Idah D. A. Olson Co. ..... 400 E 40th, Seattle 5, Wash MU2-4120
Ill The J. W. Harvey Co. ..... 6000 W 47th St. Lyons HU7-0304
Mich M. D. Savage Co. ..... 20818 Harper Ave. Detroit 36 ..... TU8-1000
Mo A. M. McIntyre ..... 1110 S Brentwood Blvd. St. Louis 17 ..... PA6-0005
NY R. J. B. Kelly Co. ..... 619 Main St. E Orange, NJ OR6-0714
Ohio J. B. Clevenger & Associates ..... 618 Hulman Bldg. Dayton 2 ..... BA3-4032
Ohio Shields Equipment Co. ..... 13400 Lakewood Hts. Blvd. Cleveland 7 ..... OR1-3040
Pa Pittsburgh Industrial Sales Co. ..... 306 1st St. Pittsburgh 15 ..... GT3-0400
Tex P. C. McIntyre Co. ..... Box 28008, Houston 4 ..... CA7-0213
Can Vickers-Wentich Ind. Sup. ..... 1500 Main St. E, Hamilton, Ont LD-1300

MANN MFG. CO., INC. ..... 209 Burlington Rd. Clarendon Hills, Ill FA3-0091
MANSFIELD & CO., LTD. FRANCE 42 Boulevard Sq. Richelieu, Clerch, Fra RE2230

MANSON LABORATORIES, INC. 375 Fairfield Ave. Stamford, Conn DA3-7291
Cal Perfectch Electronics Assoc. ..... 6007 W Washington Blvd. Los Angeles 16 ..... WE1-1041
Colo Kelley Enterprise ..... 330 E 6th St. Loveland HO7-1270
DC Amco Engineering Co. ..... 1000 16th St. NW, Washington 6 ..... EX3-1000
Ga E. G. Holmes & Assoc. ..... 4679 Roswell Rd. NE, Atlanta 9 ..... BL6-0000
Mass George Greenfeldt & Associates ..... 230 Boston Hill Rd. Waltham 54 ..... TW4-5000
NJ Bean Associates ..... 87 New St. Metuchen LE6-0070
NY DB Assoc. ..... 2007 Erie Blvd. E, DeWitt 14 ..... GR-0220
Ohio The Tilly Co. ..... 2240 Wentworth Center Rd. Cleveland RH-0005
Can Atlas Instrument Corp. Ltd. ..... 80 Wingold Ave. Toronto 10
Fra D. Freudenberg, Inc. ..... 60 Rockefeller Plaza, New York 20 ..... PL7-0150
Jap Industrial Imports Limited ..... Box 1271-Central P.O. Tokyo

MARCONI'S WIRELESS TELEGRAPH CO. LTD. Chelmsford, Essex, Eng ..... CHELT
NY Marconi's Wireless Tele Co Ltd. ..... 730 3rd Ave. New York 17 ..... TU9-0456

MARION LABS., INC. ..... Box 968, Kansas City, Mo HA8-3300

MARITIME CHEMICAL & REPAIR CORP. 425 Hamilton Ave. Brooklyn 32, NY 128-246
Pa R. L. Holliday & Co. ..... Box 10000, Pittsburgh 34 ..... LO1-9800

MARVEL & SONS, L. FRANK ..... School House Ln. Hatboro, Pa HA3-0900
Cal Insulation Supply Co. ..... 770 E Pico Blvd. Los Angeles 21 ..... RT1-5401
Fla J. A. Adam ..... Box 1903, Melbourne PA3-1001
Ga Electrical Insulation Supplies, Inc. ..... 804 Moore St. NW, Atlanta HA-2707

Ill J. J. Gloss & Co. ..... 6141 W Washington Blvd. Chicago 8 ..... ST3-0607
Mass R. W. Gray, Inc. ..... 372 Washington St. Wellesley Hl CE5-0300
NJ Electrical Insulation Sales Co. ..... Box 116, Ridgefield Park EU8-7700
NY W. B. Hoh ..... Box 600, Lyndonh LY3-0600
NC H. T. Altman Co. ..... Box 8001, Charlotte EX3-0000
Ohio Electrotech, Inc. ..... 59 N Main St. Chagrin Falls CH9-4045
Ore C. E. Riggs Inc. ..... 400 NW 6th Ave. Portland CA6-0000
Pa C. H. Hansen & Associates ..... 913 Bethlehem Pike, Philadelphia 18 ..... CH9-3077
Can H. P. Baggley Co. ..... 68 Cardiff St. N, Hamilton, Ont. JA3-1000

MARKITE CORP. ..... 155 Woody Pl. New York 14, NY OR6-7384
Cal O. Miller Associates ..... 6010 W 3rd St. Los Angeles WE6-7300
Colo Peter Engineering Sales Co. ..... Box 451, Littleton PY4-0007
Ill Vasem-Gallagher ..... 3100 North Blvd. Oak Park EU8-8200
Mass R. W. Hatfield ..... 54 Mastercoe Dr. Darlington YO6-0072
Minn Anderson & Associates ..... 3400 York Ave. N, Minneapolis JO4-0000
Mo J. Dustin Co. ..... Box 8000, Ferguson Sta. St. Louis JA1-7000
NJ G. E. Goodrich ..... Harter Dr. Wharton DE-0014
NY Engineering Components ..... Box 184, Eastwood Sta. Syracuse HA7-0181
Ohio Tower Engineering Co. ..... 5400 Linden Ave. Dayton CL6-0001
Tex Jo-Joyce Engineering Sales Corp. ..... 197 Walnut Hill Village, Dallas FL7-1411
Wash D. Miller Sales Co. ..... 2000 N 45th St. Seattle ME3-1070

MARLEY CO. ..... 222 W Gregory Blvd. Kansas City 14, Mo DE6-2222
Cal The Marley Co. ..... 104 E Main St. Alhambra AT1-0000
Cal The Marley Co. ..... 450 Market St. San Francisco 11 ..... DO2-0200
DC The Marley Co. ..... 4001 Wisconsin Ave. NW, Washington EM7-0477
Ill The Marley Co. ..... 111 W Washington St. Chicago DA6-1000
Kan The Marley Co. ..... 6001 Fairlee Trafficway, Kansas City 15 ..... FD-1300
NY The Marley Co. ..... 75 West St. New York City 6 ..... BO9-0225
Ohio The Marley Co. ..... 4001 Wooster Pike, Cincinnati 27 ..... BR2-3070
Pa The Marley Co. ..... 13 S 13th St. Philadelphia 3 ..... MA7-7000
Tex The Marley Co. ..... 2103 Welch, Houston 19 ..... JA8-0001

MARQUARDT CORP., THE ..... 16555 Saticoy St. Van Nuys, Cal ST1-2121
DC The Marquardt Corp. ..... 1700 K St. NW, Washington 6 ..... EX3-1277
Ohio The Marquardt Corp. ..... 30 N Main St. Dayton 2 ..... BA4-0021

MARSH INSTRUMENT CO. DIV. CELO OIL & GAS CORP. ..... 3300 Roosevelt St. Skokie, Ill OR3-4300
Ala Marsh Instrument Co. ..... Box 4944, Birmingham 6 ..... TR1-1470
Mass Marsh Instrument Co. ..... 77 Pudding Hill, Quincy FR2-0121
NJ Marsh Instrument Co. ..... 2200-11 Anderson Ave. Fort Lee WH5-3300
Ohio Marsh Instrument Co. ..... 14007 Detroit Ave. Cleveland AC1-6007
Pa Marsh Instrument Co. ..... 512 West Ave. Jenkintown TU7-1215
Tex Marsh Instrument Co. ..... 1211 Bethwell, Houston CA3-2770

MARSH & MCLENNAN, INC. ..... 120 S LaSalle St. Chicago 4, Ill

MARSHALL OF CAMBRIDGE ELECTRONICS LTD. The Aerodrome, Cambridge, Eng CAM291
Aus Gordon Ross Pty. Ltd. ..... 21 Bertie Ave. Vermont, Melbourne
Aust Edsel, Ltd. ..... Clemen 4, Munich 23, Ger
Fr Aramu, S.A. ..... 20 Rue De La Paix, Paris 2
Ger Edsel, Ltd. ..... Clemen 4, Munich 23
India Chola, Sendam ..... 814, S.V.P. Rd. Bombay 4
Ital Impianti-Antonia Forjaz ..... Principe-Amedeo 20b, Amsterdam
Port D.E.K.J. Nuclear Corp. ..... Via A. Rosbod 90, Milan
Jap Sumitomo Shoji Kaisha, Ltd. ..... 22, 5-chome, Kitahama, Higashi-ku, Osaka
NZ Electronic Develop. & Appli. Co. Ltd. ..... 18-20 Lome St. Wellington
S Af Perma Holdings Ltd. ..... 7 Newton St. Wanmer, Johannesburg
Swed Elektronikbolaget A.B. ..... Sorengagatan 96, Stockholm
Swit Edsel, Ltd. ..... Postfach 104, Basle 2

MARSHALL-SORLETT, LTD. ..... 44 Tower Hill, London, E C3, Eng MOT.1441

MARTIN CO. NUCLEAR DIV. ..... Baltimore 3, Md MU7-3000
Ala The Martin Co. ..... Elec. Sys. Center Bldg. Huntsville HS-0700
Cal The Martin Co. ..... 6300 W 80th St. Los Angeles OR-0180
Colo The Martin Co. ..... 12200 S Highway 94, Denver PY4-0011
Fla The Martin Co. ..... 5007 S Orange Blossom Trail, Orlando OR1-0411
Haw The Martin Co. ..... 4979 Kalihale St. Honolulu 18 707011
Ill The Martin Co. ..... 140 S Dearborn St. Chicago DE2-0400
Mass The Martin Co. ..... 9 Mercer Rd. Natick OL2-1090
NM The Martin Co. ..... Kirtland A. F. Base, Albuquerque CH2-0511
NY The Martin Co. ..... 405 Lexington Ave. New York YU9-7300
Ohio The Martin Co. ..... 1103 Talbott Tower, Dayton 2 ..... BA6-0600
Ohio The Martin Co. ..... 215 Euclid Ave. Cleveland MU-4384
Ger The Martin Co. ..... 66 Kaiser-Friedrich-Ring Str. Wiesbaden 61210

MARVEL-SCHEBLER PRODUCTS DIV. BORG-WARNER CORP. ..... 2700 S. Shoto Rd. Decatur, Ill 428-4231

MARYLAND SHIPBUILDING & DRYDOCK CO. Box 537, Baltimore 3, Md EL5-4000
Calif L. A. Christopher Co. ..... 1715 Tech St. Denver 6 ..... EM4-1200
Mich Bradbury Kentrich Assoc. ..... 3840 W Grand Blvd. Detroit 2 ..... TR0-0030
Mo Midwestern Power Equip. Co. ..... 1314 W 47th St. Kansas City 12 ..... VA1-7007
Mo Midwest Machinery Co. ..... 38 Pinkley Industrial Ct. St. Louis 17 ..... MT7-0300
Ohio H. W. Kaiser Co. ..... 1300 Euclid Ave. Cleveland 15 ..... CH1-0900
Ohio Hare Equipment Co. ..... 1750 Section Rd. Cincinnati 39 ..... MI1-0700
Pa J. L. Sauer & Associates ..... Box 664, York VO2-0217
Tex The Tennant Co. ..... Gulf Bldg. Houston CA8-0404
PR R. I. Gil ..... 1300 Ponce de Leon Ave. Santurce 1 ..... SA0-3000

MASON-NEILAN, DIV. OF WORTHINGTON CORP. Hopewell, Mass PO-4000
Ill Mason-Neilan ..... 84 Old Orchard, Skokie OR6-4134
NJ Mason-Neilan ..... 300 Bellevue Ave. Upper Montclair PR6-0615
NY Mason-Neilan ..... 9 E Genesee St. Skaneateles OV6-0781
NY Mason-Neilan ..... 270 Park Ave. New York 35 ..... PL5-1035
Pa Mason-Neilan ..... 11 Bates Ave. Bala-Cynwyd TE5-0415
Pa Mason-Neilan ..... 6000 Willow Ave. Pittsburgh 24 ..... LO1-9511
Va Mason-Neilan ..... 5000 W Broad St. Richmond 26 ..... AT8-0045

MASON, SHAVER & DUNAGES, INC. Box 302, Ionia, Pa ..... [illegible]

MASSACHUSETTS COMMISSION
ON ATOMIC ENERGY ..... 100 Cooneway St. Boston, Mass CAY-4400

MATERIAL SERVICE DIV. GEN. DYNAMICS CORP.
200 W Washington St. Chicago 4, Ill FRD-3000

MATHESON CO. ..... 932 Paterson Plank Rd.
East Rutherford, NJ WEI-3400

Cal The Matheson Co., Inc. ..... Newark STD-5500
Ill The Matheson Co., Inc. ..... Joliet SAD-9700
Ohio The Matheson Co., Inc. ..... Norwood (Cincinnati) MEI-8200
Can Matheson of Canada, Ltd. ..... Whitby, Ontario MOB-5007

MATTHEWS & YATES LTD.
CYCLONE WEL. ..... Swinton, Manchester, Eng SWI271

Eng Matthews & Yates, Ltd. ..... 155 Rye La. Peckham, London SE 15 ..... NEW171
Eng Matthews & Yates, Ltd. ..... Digbeth, Birmingham 5 ..... MIDD84
Eng Matthews & Yates, Ltd. ..... 32 Queen Sq, Leeds, 1 ..... LEE-2121
Eng Matthews & Yates, Ltd. ..... The Lansdowne, Bournemouth BOS-3400
Scot Matthews & Yates, Ltd. ..... 18 Hyndland St, Glasgow, C3 ..... GWS72
Wls Matthew & Yates, Ltd. ..... 5 St Andrews Pl. Cardiff, Wales CAD-7200

MAX ARC LTD. ..... 41 Tanner Rd. Walton-on-Thames, Surrey, Eng ..... [illegible]

MAXON CONSTRUCTION CO. ... 2600 Fur Mills Ave. Dayton 10, Ohio AXD-2121

MECHANICAL EQPT. CO., INC. 861 Carondelet St. New Orleans 12, La ... [illegible]

MERMANTE METAL CORP. ... 714 North Ave. New Rochelle, NY ..... [illegible]

Cal Lincoln Foundry Corp. ..... Los Angeles
Cal Vulcan Foundry Co. ..... Oakland
Conn Pawel-Birmingham Co., Inc. ..... Ansonia
Ga Georgia Iron Works ..... Augusta
Ill Gosnelles Foundry Co. ..... Chicago
NY Pelham Foundry Co. Inc. ..... Buffalo
Ohio Dayton Casting Co. ..... Dayton
Pa Johnstown Foundries, Inc. ..... Grove City
Pa Brendale Foundry & Machine Co. Pittsburgh
Tenn Rep-Meehan Foundries ..... Chattanooga
Tex Oil City Iron Works ..... Corsicana
Wash Washington Iron Works ..... Seattle

MERLLON, INC., GEORGE T. ... 122 Hanover St. New York 38, NY COS-3400

MELCOR ELECTRONICS CORP. 45 Toledo St. E Farmingdale, NY

Cal Component Sales California ..... 4058 Van Nuys Blvd. Sherman Oaks
Colo Dwayne Electronics ..... 10660 Comet Ln. Denver 20
Minn Elcom Engineering Corp. ..... 948 Walnut St. Newtonville 60
Ala Wild Sales Co. ..... 1000[illegible] Chandler Ln. St. Louis
NJ W. Donnelly ..... 57 Lakeside Trail E. Pequea Lakes
NY Offel Sales Inc. ..... 60 Shore Rd. Port Washington
Pa Argus Industries ..... P.O. Box 60, Wanamassa

MENASCO MFG. CO. ..... 600 S San Fernando Blvd. Burbank, Cal .. [illegible]
Tex Menasco Mfg. Co. ..... Box 7207, Sylvania Sta. Fort Worth ATW-5477

MENLO RESEARCH LABORATORY 1437 Bay Rd. East Palo Alto, Cal ..... [illegible]

MERCK SHARP & DOHME OF CANADA LTD.
100 De Courcelle St. Montreal 3, PQ ..... [illegible]

MERSAN INSTRUMENT CO. ..... [illegible] Madison Ave. Cleveland 2, Ohio AT1-1100

Cal C. Meriam Co. ..... 6017 Telegraph Rd. Los Angeles 22 ..... AMB-0271
Ill P. D. Hanson ..... 10000 S Western Ave. Chicago 43 ..... BRA-0800
Mich Smith Instrument & Equip. Co. ..... 7140 E. Davison Ave. Detroit 12 ..... TWI-4000
Mo C. F. Gast Co. ..... 6110 Gravois Ave. St. Louis 39 ..... BYD-7700
NJ Mabe Equipment Corp. ..... 400 Grand Ave. Englewood LOT-4000
Pa Midwest Co. ..... 555 N 22nd St. Philadelphia 4 ..... EVE-0400

MERZ and McLELLAN ..... Milham, Esher, Surrey, Eng

MESINGER BEARINGS, INC. Box 7256, Philadelphia 1, Pa GAS-0956

Conn Mesinger Bearings, Inc. ..... 84 Chatham Ave. West Hartford 10 ..... AOR-0347
Ill Mesinger Bearings, Inc. ..... 1427 1050 St. Chicago Heights HIA-2970
Mich Mesinger Bearings, Inc. ..... 440 New Center Bldg. Detroit 2 ..... TRI-0303
Ohio Mesinger Bearings, Inc. ..... 720 Sheffield Dr. Springfield FAD-9400
Ohio Mesinger Bearings, Inc. ..... 155 Brier Ave. North Canton NTD-2800
Pa Mesinger Bearings, Inc. ..... 84 (P), Vertical WEA-5970
Pa Mesinger Bearings, Inc. ..... 720 N Tucker St. Glenside TUY-7400

METAL BELLOWS CORP. ..... 400 Moss La. Wellesley, Mass CEL-1940
Cal Metal Bellows Corp. ..... 1007400 Knapp St. Chatsworth

METAL DIFFUSERS, LTD. ... 200 Station Rd. Isleworth, Middx, Eng ..... [illegible]
Eng Mitchell Engineering, Ltd. ..... The Bridge, Pontefract, Northants PO4201

METAL HYGIENE, INC. ..... 13-24 Congress St. Beverly, Mass ..... [illegible]
Ill V. F. Phillips Co. ..... 405 N Michigan Ave. Chicago ..... [illegible]

METAL & THERMIT CORP. ..... Gateway Ave. Rahway, NJ ..... [illegible]

Cal Metal & Thermit Corp. ..... 1000 E Maple Ave. El Segundo OSD-1100
Ga Metal & Thermit Corp. ..... 606 Western Ave. NW, Atlanta JAS-0415
Ind Metal & Thermit Corp. ..... 433 E 127st St. East Chicago EXD-2300
Ky Metal & Thermit Corp. ..... Box 180, Crestline CAVER-0411
Mich Metal & Thermit Corp. ..... 2300 E 9 Mile Rd. Detroit 20 ..... JOS-0760
Tex Metal & Thermit Corp. ..... 101 N San Jacinto St. Houston 2 ..... CAS-4000

METALAB EQUIPMENT CO. ... 270 Duffy Ave. Hicksville, NY

Ala J. A. Bland & Co. ..... 3018 1st Ave. Birmingham ALL-0500
Cal W. A. Bard ..... 700 Seaview Dr. Newport Beach OSB-4040
Ill P. Cooper ..... 140 N State St. Chicago 2 ..... ANS-4040
Md A. S. Wigley Corp. ..... Box 604, Annapolis COS-0501

Mass J. E. Rawlings ..... 34 Linda Ave. Somerville Sta. Birmingham TRO-1005
Mo W. Steve & Co. ..... 4002 Dismar Blvd. St. Louis 6 ..... FOY-7000
Mont C. C. Wisham, Inc. ..... 440 E 100th Ave. Denver 10, Colo ATD-1407
NY J. E. Dumas & Co. ..... R.F.D. 01 Albany Shaker Rd. Watervliet STS-4008
Ohio G. A. Ebert ..... Box 134, Sta. H, Toledo 10 ..... GIA-7031
Pa M. C. Wilson ..... 100 Street Rd. Southampton ELY-1040
W Va B. Pentzer Co. ..... Box 6130, Charleston DUN-0516

METALLO GASKET CO. ..... 16 Redwing St. New Brunswick, NJ ..... [illegible]

METALLURGIE & MECANIQUE NUCLEAIRES (MMN)
20 Rue Vale de Linge, Heestel, Linge, Belg ..... [illegible]

Belg Soc Generale Des Minerais, S.A. 31 rue de Monte - Bruxelles ..... [illegible]
Ital Studio Applicazioni Perlomat ..... 4, Via Balduccci, Milan ..... [illegible]

METALS DISINFECTANTS CO. DIV.
AMERICAN-MARIETTA CO. ..... Box 276, Elizabeth 2, NJ ..... [illegible]

Cal L. W. Hoey ..... 1071 S Boyle Ave. Los Angeles 23 ..... AMD-5553
Ill J. A. McKinley ..... 10010 S Western Ave. Chicago 43 ..... [illegible]

METCO ..... 1105 Prospect Ave. Westbury, NY ..... [illegible]

METCO LTD. ..... Cobham, Surrey, Eng ..... [illegible]

Eng Metco Ltd. ..... 55, Victoria St. London, S.W.1 ..... [illegible]
Eng Metco Ltd. ..... 38, Deansgate, Manchester, 3 ..... [illegible]
Eng Metco Ltd. ..... Birmingham Exchange, Stephenson Pl.
Birmingham, 2 ..... [illegible]
Eng Metco Ltd. ..... 66, Albion St. Leeds, 1 ..... [illegible]
Eng Metco Ltd. ..... 14, Neville St. Newcastle-on-Tyne ..... [illegible]
Eng Metco Ltd. ..... 9, St. James' Row, Sheffield, 1 ..... [illegible]
Scot Metco Ltd. ..... 204, Bath St. Glasgow, C.2 ..... [illegible]

METEOROLOGY RESEARCH INC. 2680 N Lake Ave. Altadena, Cal ..... [illegible]

METERING PUMPS LTD. ..... 23 The Hall, Ealing, London W5, Eng

Belg [illegible]
Br G [illegible] Ltd. ..... Water St. Georgetown
Col Colombia Commercial ..... Box 38, Colombia
Fin T. J. Cocoma ..... Bogner, Sundell, Co. Dublin
Ger Oster Meeberg ..... Duisburg 22, Duisburg
Hong Arnold & Co. Ltd. ..... 60 Wainwright St. Manchester 1
India Candy Filters (India) Private Ltd. ..... Home St. Bombay 1
Jap Reginald Atkins Ltd. ..... 7-8 E Pasadi, Kingsway
Ken A. Brunsen & Co. (E Africa) Ltd. Box 888, Nairobi
Mal Hooper Griffiths & Co. Ltd. ..... Box 547, Kuala Lumpur, Selangor
NZ Candy Filters (NZ) Ltd. ..... Box 1770, Auckland C.1
S Af Dreyer & Dobson Ltd. ..... Box 7705, Johannesburg

METHIE, INC. ..... Box 223, Deerfield, Ill ..... [illegible]

Conn C. Walsh Associates ..... 170 Lake Ave. Greenwich TOW-1015
Ill C. Walsh Associates ..... Box 246, Deerfield ..... [illegible]
Tenn C. Walsh Associates ..... Box 661, Oak Ridge ..... [illegible]

METTLER INSTRUMENT CORP Box 100, Princeton, NJ ..... [illegible]

Cal Mettler Instrument Corp. ..... 540 Woodward Ave. Stamford
Ga Mettler Instrument Corp. ..... 2090 Woodacre Rd. NE, Atlanta
Ill Mettler Instrument Corp. ..... 305 Gold St. Park Forest
Mass Mettler Instrument Corp. ..... 54 Oneida Rd. Winchester
NJ Mettler Instrument Corp. ..... 419 Brookside Dr. Cranford
NJ Mettler Instrument Corp. ..... Onondaga Trail, Medford Lakes
NY Mettler Instrument Corp. ..... Box 32, East Sta. Yonkers
NC Mettler Instrument Corp. ..... 717 Kenilworth Rd. Charlotte
Ohio Mettler Instrument Corp. ..... [illegible] Long Ln. Cincinnati
Tex Mettler Instrument Corp. ..... 1802 Capella Dr. Houston 55

MICA INSULATOR DIV. MMM ..... 797 Broadway, Schenectady 1, NY ..... [illegible]

Cal Minnesota Mining & Mfg. Co. ..... 3600 S Garfield Ave. Los Angeles 22 ..... RAD-0841
Cal Minnesota Mining & Mfg. Co. ..... 100 Shaw St. S San Francisco PLO-0900
Co Minnesota Mining & Mfg. Co. ..... 2200 Peachtree Ind. Blvd. Chamblee ..... [illegible]
Ill Minnesota Mining & Mfg. Co. ..... 6500 Harlem Ave. Bedford Park CLE-2000
Mass Minnesota Mining & Mfg. Co. ..... 1200 Centre St. Newton Center 59 ..... DEC-9010
Minn Minnesota Mining & Mfg. Co. ..... 900 Grove St. St. Paul 1 ..... PRE-8011
NJ Minnesota Mining & Mfg. Co. ..... 100 Grand Ave. Ridgefield WHI-0700
NY Minnesota Mining & Mfg. Co. ..... 200 Genesee St. Buffalo 6 ..... BAR214
Ohio Minnesota Mining & Mfg. Co. ..... 12000 Brookpark Rd. Cleveland 35 ..... CLE-4000
Pa Minnesota Mining & Mfg. Co. ..... [illegible] King Ave. Philadelphia 32 ..... PEL-[illegible]
Tex Minnesota Mining & Mfg. Co. ..... 5231 Aona Aona Ave. Dallas 20 ..... DAY-7211
Wash Minnesota Mining & Mfg. Co. ..... 3400 1st Ave. S, Seattle 4 ..... MAD-1660

MICHIGAN CHEMICAL CORP. RARE EARTHS & THORIUM DIV.
St. Louis, Mich 4871

Co Michigan Chem. Corp. ..... Denver Dr. Savannah ELS-4100
NY Michigan Chem. Corp. ..... 220 Park Ave. New York MUS-5400
Tex Michigan Chem. Corp. ..... 1200 Walton Dr. College Station VIS-7215

MICO INSTRUMENT CO. ..... 80 Trowbridge St. Cambridge 38, Mass

MICROCARD CORP ..... West Salem, Wis 6-2001

NY Microcard Corp. ..... 16 E 42nd St. New York 17 ..... TNT-5400
DC Microcard Corp. ..... 501 20th St. NW, Washington FEA-4000
Belg Microcard Corp. ..... 21 du Petit Sablonnes 6, Geneva 19

MICRO CIRCUITS CO. ..... New Buffalo, Mich ..... [illegible]

MICRO SWITCH DIV. MINNEAPOLIS-
HONEYWELL REGULATOR CO. Chicago & Spring Sts. Freeport, Ill AMD-7122

Ariz Micro Switch ..... 4025 N 7th Ave. Phoenix 13 ..... CHA-7701
Cal Micro Switch ..... 6800 Telegraph Rd. Los Angeles 22 ..... BAS-7104
Colo Micro Switch ..... 5100 S Dahlia St. Denver 4 ..... HUS-9410
Ill Micro Switch ..... 5000 N Lincoln Ave. Chicago 60 ..... [illegible]
Mass Micro Switch ..... 1200 Soldiers Field Rd. Boston 35 ..... ALA-3000
Mich Micro Switch ..... 10201 Plymouth Rd. Detroit 27 ..... WEB-0577
Minn Micro Switch ..... 2747 4th Ave. S, Minneapolis 8 ..... PEN-3236
Mo Micro Switch ..... 3140 Hampton Ave. St. Louis 10 ..... MET-1110

NY Micro Switch ..... 96-20 Eldimar Ave. Long Island City 1 ..... STO-4006
NC Micro Switch ..... 1120 Gorgonne Rd. Charlotte 9 ..... JAS-2000
Tex Micro Switch ..... 6000 N Central Expwy. Dallas 6 ..... EMI-8227
Wash Micro Switch ..... 401 Pontius Ave. Seattle 9 ..... MUS-4600

MICROWAVE ASSOCIATES, INC. South Ave. Burlington, Mass ..... [illegible]

Ariz Carson Associates, Inc. ..... 319 S Hanson Rd. Scottsdale WHS-3011
Cal T. L. Scimar Co. ..... 6554 W Pico Blvd. Los Angeles WEB-3175
Colo F. A. Pease Co. ..... 4021 E 50th Ave. Denver 7 ..... DOR-4640
DC Calles-Dan Electronics, Inc. ..... 1017 Ingleside Ave. Baltimore 7, Md ..... [illegible]
Fla W. R. Wimberly Co. ..... 633 S Fort Harrison Ave. Clearwater CLR-7672
Ill Gasser & Clark Co. ..... 4044 N Western Ave. Chicago 45 ..... [illegible]
Md Calles-Dan Electronics, Inc. ..... 1017 Ingleside Ave. Baltimore 7 ..... [illegible]
Mass F. J. Engineering Sales Co. ..... P.O. Box 223, Wenham WAS-4000
NY Rand-Tullahan Corp. ..... 5015 Monroe Ave. Rochester 18 ..... [illegible]
NY E. B. A., Inc. ..... 240 Great Neck Rd. Great Neck ..... [illegible]
Ohio H. Tapkin & Co. ..... 5040 Cornell Dr. Dayton 6 ..... CEY-0170
Tex P. J. Scanlon Co. ..... 3600 Inwood Rd. Dallas FLI-0001
Per Microwave International Corp. ..... 90 W 46th St. New York 36, NY TUO-0700

MIDDLE WEST SERVICE CO ..... 29 S Wabash St. Chicago, Ill

MID-EASTERN ELECTRONICS INC. 37 Commerce St. Springfield, Mass ..... [illegible]

Cal G. H. Vaughan Co. ..... 2000 E Foothill Blvd. Pasadena STE-4429
Cal G. H. Vaughan Co. ..... P.O. Box 1202, Palo Alto DAl-1347
Colo Longmont Smith Assoc., Inc. ..... 1013 16th St. Denver 2 ..... [illegible]
Conn M. S. Caldwell, Inc. ..... 195 W Main St. Avon CRY-0727
DC Clark Small ..... 4000 Channel Oak Dr. Bethesda, Md ..... [illegible]
Ill E. W. Meyers Co. ..... 2713 N Oakland Ave. Chicago 64 ..... [illegible]
Mich J. L. Potter Co. ..... 12000 James Couzens Hwy. Detroit 21 ..... [illegible]
NC The Cooler Co. ..... 1000 Beech St. Winston-Salem PAD-1400
Pa J. E. Cosso ..... Box 604, Paoli ..... [illegible]
Pa L. Sherrick Co. ..... 100 Clinton Blvd. Pittsburgh 36 ..... TUI-5000
Wash Hafer & Co. ..... 5 W Mercer St. Seattle 99 ..... ATW-1011
Can Miller Engineering & Sales Co. ..... 870 Richmond St. W, Toronto, Ont. ..... [illegible]

MIDLAND HEATING &
VENTILATION CO. LTD. ... Bedford Rd. Birmingham 11, Eng ..... VICTOR

Eng J. Calder ..... [illegible]
Eng J. Mercer ..... [illegible]
Eng R. R. Bennett ..... [illegible]
Eng R. Ware ..... 99 Judith Dr. Evington, Leicester ..... [illegible]
Scot W. K. Flynn ..... 105 Sauchiehall St. Glasgow 2 ..... [illegible]

MIDWEST PIPING DIV. CRANE CO.
1400 S 2nd St. St. Louis 4, Mo ..... [illegible]

Cal Midwest Piping Div. Crane Co. ..... 480 Anderson St. Los Angeles 33 ..... AMD-0120
Ga Midwest Piping Div. Crane Co. ..... 72 11th St. NE, Atlanta 9 ..... TRe-0114
Ill Midwest Piping Div. Crane Co. ..... 72 W Monroe St. Chicago 3 ..... FRB-1000
Mass Midwest Piping Div. Crane Co. ..... 640 E Squantum St. Quincy 71 ..... GRI-4440
NY Midwest Piping Div. Crane Co. ..... 300 Park Ave. New York 22 ..... PLA-7300
Ohio Midwest Piping Div. Crane Co. ..... 4900 Lake Ave. Cleveland 3 ..... AT1-3000
Ohio Midwest Piping Div. Crane Co. ..... 600 Mayo Bldg. Tulsa 3 ..... LOG-1014
Pa Midwest Piping Div. Crane Co. ..... 1077 Park Bldg. Pittsburgh 22 ..... COl-2540
Tex Midwest Piping Div. Crane Co. ..... 13200 Todd Rd. Houston 24 ..... OVI-4400

MIEROS, INC. ..... 7000 SW Hawthorn Ave. Portland 10, Ore CHe-6122

MILES ELECTRONICS LTD. ... Shenstone Aept. Shenstone, Sussex, Eng ..... [illegible]

MILES HEVOLT LTD. Old Shenstone Rd. Shenstone-by-Ess, Sussex, Eng. ..... [illegible]

MILLER MFG. CO., JAMES ..... 130 Exchange St. Malden, Mass ..... [illegible]

Cal W. R. Knight Co. ..... 14071 W Pico Blvd. Los Angeles ..... [illegible]
Cal Meadlump & Hamer ..... 140 11th St. San Francisco ..... [illegible]
Ill E. C. Corbett ..... 6007 N Northwest Hwy. Chicago ..... [illegible]
Ill G. G. Ryan ..... 9401 S Halsey St. Chicago ..... [illegible]
Ind Macbeth/Schmidt/Lewis ..... 430 E 86th St. Indianapolis ..... [illegible]
Mass Gother Sales Co., Inc. ..... 40 Pearl St. Brookline ..... [illegible]
Mo Kelly/Schmitz/Winkeler Assoc. ..... P.O. Box 8466, Kansas City ..... [illegible]
NY J. Dillard Associates, Inc. ..... 99 Main St. Port Washington ..... [illegible]
Pa L. D. Lowery, Inc. ..... 5001 W Chester Pike, Newtown Square ..... [illegible]
Tex J. Yeats Co. ..... 1401 Pleasant Dr. Dallas ..... [illegible]
Can H. B. Gage, Ltd. ..... 40 Dundreth Rd. Scarborough, Ont. ..... [illegible]
Per Technical Equipment Co. ..... Metro & Milton Sts. Rahway, NJ ..... [illegible]

MILLER & SON, INC., FRANKLIN P. 26 Meadow St. East Orange 26, NJ ..... [illegible]

MILLIPORE FILTER CORP. ... Bedford, Mass

Cal H. A. Arnson ..... Box 1025, Westland ..... [illegible]

MINCO PRODUCTS, INC. ..... 740 Washington Ave. N, Minneapolis 1, Minn ..... [illegible]

Cal The Pentagon Co. ..... 301 Pasadena Ave. South Pasadena ..... [illegible]
Md Holden Engineering Sales Co. ..... 1108 Gypsy La. W, Towson 4 ..... [illegible]
Minn L. S. Pavenstedt & Associates ..... 680 Pleasant St. Wayzata 5 ..... [illegible]
Minn Engineering Products, Assoc. ..... 2110 Grand Ave. St. Paul 5 ..... [illegible]
NJ E. S. Davis Co. ..... 80 River St. Chatham ..... [illegible]
Wash M. R. Smith & Co. ..... 6801 1st Ave. S, Seattle 6 ..... [illegible]

MINERAL CONCENTRATES & CHEMICAL CO. INC.
Box 183, Loveland, Colo ..... [illegible]

Colo Mineral Concentrates & Chemical 1st National Bank, Denver 2 ..... [illegible]

MINIATURE PRECISION
BEARINGS, INC. ..... Precision Pk. Keene, NH ..... [illegible]

Cal MPB, Inc. ..... 2001 Monbell St. Redwood City ..... [illegible]
Colo Bearings Service & Supply Co. ..... 4400 Claude Ct. Denver 10 ..... [illegible]
Ga C. W. Smith Co. ..... 8180 Maple Dr. NE, Atlanta 6 ..... [illegible]
Ill MPB, Inc. ..... 3701 W Howard, Chicago 45 ..... [illegible]
Ind Hamilton Assoc. Inc. ..... Residence Center Bldg. Cincinnati 27 ..... [illegible]
Iowa MPB, Inc. ..... 427 1st Ave. SE, Cedar Rapids ..... [illegible]
Minn MPB, Inc. ..... 410 Drydenn St. Simon 10 ..... [illegible]
Minn MPB, Inc. ..... 10000 Bond Ave. S, Minneapolis 20 ..... [illegible]
NY MPB, Inc. ..... 10 Purdy Ave. Rye ..... [illegible]

Ohio Ripley, Bowers & Church ..... 5607 Lee Rd. Cleveland 24 ..... SK3-1220
Pa MPB, Inc. ..... 50 W Chester Pk. Havertown EG9-5600
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Ill Radiation Equipment Co. ..... 400 E Ohio St. Chicago 11 ..... SU7-8115
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Md	Herb-ed Vulcanized Fibre Co. ..... 9201 York Rd., Towson	VA5-6540
Mass	National Vulcanized Fibre Co. ..... 68 Prospect St., Walpole	TW4-5000
Mich	National Vulcanized Fibre Co. ..... 18070 James Couzens Hwy., Detroit	EM3-5600
Mo	National Vulcanized Fibre Co. ..... 5 S Brentwood Blvd., St. Louis	PA5-0077
NY	National Vulcanized Fibre Co. ..... 50 Church St., New York	COT-0300
Ohio	National Vulcanized Fibre Co. ..... 5000 Lee Rd., Cleveland	HE1-0240
Pa	National Vulcanized Fibre Co. ..... 6010 Market St., Upper Darby	MU9-5700
Tex	National Vulcanized Fibre Co. ..... 3001 Gus Thomasson Rd., Dallas	DA4-4000
Wis	National Vulcanized Fibre Co. ..... 700 N Broadway, Milwaukee	BR6-0800

NAVIGATION COMPUTER CORP. Valley Forge Ind. Pk. Horsham, Pa GL5-4000

Cal	W. E. Gate Co. ..... P.O. Box 882, Cupertino	YU6-1000
Cal	W. E. Gate Co. ..... 3277 Glendale Blvd., Los Angeles 39	NO6-1300
Ill	Reel Associates ..... 303 Schlosser Bl., Riverside	WI7-9000
Minn	Measurement Equipment Co. ..... 946 Main St. N, Roseville	PA6-0000
Mich	The Tilty Co. ..... 6000 Fairfield Ave., Detroit	TR4-0021
NY	WSJ & Associates, Inc. ..... 1010 Northern Blvd., Roslyn	MA1-0000
NY	Advanced Components Corp. ..... 110 Lesley Ave., Liverpool	CR6-7000
NC	M. J. McDonald Co. ..... Box 1, Pfafftown	WA6-2110
Ohio	The Tilty Co. ..... 5005 Wainsworth Center Bl., Cleveland 13	EM1-0000
Ohio	The Tilty Co. ..... 040 Salem Ave., Dayton	CR7-0000
Pa	WSJ & Associates, Inc. ..... P.O. Box 95, Southampton	LO8-7070
Va	WSJ & Associates, Inc. ..... 1011 Highland St. N, Arlington	JA4-0374

NEWCASTLE & ZAMBA (CANADA) LTD.

	4 Bartcliff Rd., Toronto 18, Ont	CL1-4871
Alta	Precision Oilfield Services Ltd. ..... 7725-104th St., Edmonton	HO6-0404
Alta	Precision Oilfield Services ..... 101 - 14th St. SW., Calgary	AT3-1500
BC	Arctic Instruments Co. ..... Box 1075, Halifax	3-0400
Ont	Barnfield (Canada) Limited ..... 4 Barnfield Rd., Toronto 14	CL5-0100

Ont	Aerodyne Limited ..... 457 Cadiscta St., Ottawa 4	CH3-7741
Que	Aviation Electric Limited ..... 200 Lacombe Blvd., Montreal	HA4-5811
Isrl	Precision Oilfield Services ..... Box, Tel A., Israel	

NILCO METALS, INC. Canaan, Conn TA6-5407

NIRATOSH, S. V. Hendricks 20, The Hague, Neth

NITROX INDUSTRIES INC. Box 377, Bayonne, NJ HE3-5029

Ill	D. Dotlo Sales ..... 5650 W Peterson Ave., Chicago 46	JU9-5720
Ind	D. Dotlo Sales ..... 5650 W Peterson Ave., Chicago 46, Ill	JU9-5720
Mass	Chelis, LeBlanc Sales Co. Inc. ..... 886 Main St., Waltham 54	TW3-5740
Minn	D. Dotlo Sales ..... 5220 N Hopkins, Milwaukee, Wis	
NJ	E. Glass ..... 350 W 57 St., New York City 19, NY	JU6-0440
NY	E. Glass ..... 350 W 57 St., New York City 19	JU6-0440
NY	M. Parker Associates, Inc. ..... 70 W Chippewa St., Buffalo 2	TL6-5540
Ohio	J. O. Glass Co. ..... 10201 Euclid Blvd., Cleveland 10	GE3-5444
Wis	D. Dotlo Sales ..... 5220 N Hopkins, Milwaukee	

NORCHEMICAL ASSOCIATES, INC.

	230 Riverside Dr., New York 25, NY	AC2-4000

NORTRON PRODUCTS, INC. 1007 Thos. Jefferson St. NW, Washington 7, D. C. DE-7000

NOVATRONIC ASSOCIATES, INC. 32 Tonawanda Ave., Hauppauge, NY FP9-9040

NOVATRONICS LABORATORY ..... Tinley Park, Ill STS-2300

Ill	Central Engineering Sales Co. ..... 3017 W Roosevelt Rd., Lombard	MA9-2100

	NEW DEPARTURE DIV. GMC ..... 300 E Main St., Bristol, Conn	LU2-4371
Cal	New Departure Div. GMC ..... 3600 S Broadway, Los Angeles 7	AD0-6161
Cal	New Departure Div. GMC ..... 865 Marshall Ct., Redwood City	EM5-8344
Ill	New Departure Div. GMC ..... 333 W Adams St., Chicago 6	DE3-7400
Ind	New Departure Div. GMC ..... 2200 W Southern St., Indianapolis 6	MA5-4374
Mass	New Departure Div. GMC ..... 31 St. James Ave., Boston 16	HA6-0047
Mich	New Departure Div. GMC ..... 7-136 General Motors Bldg., Detroit 2	TR2-4700
Mo	New Departure Div. GMC ..... 8421 N Lindbergh Blvd., St. Ann	FE3-6500
NY	New Departure Div. GMC ..... 700 James St., Syracuse 3	GR2-5221
NC	New Departure Div. GMC ..... 1011 E Morehead St., Charlotte 5	FR6-5565
Ohio	New Departure Div. GMC ..... 10000 Cedar Ridge Rd., Cleveland 16	GD1-2625
Pa	New Departure Div. GMC ..... 7 Bala Ave., Bala-Cynwyd	MO4-4373
Wis	New Departure Div. GMC ..... 647 W Virginia St., Milwaukee 4	BR6-4040

NEW ENGLAND NUCLEAR CORP.

	575 Albany St., Boston, Mass	HA6-7311

NEW LONDON INSTRUMENT CO INC.

	82 Union St., New London, Conn	

NEW YORK AIR BRAKE CO. ..... 230 Park Ave., New York 17, NY LD-7000

NEW YORK SHIPBUILDING CORP. Camden 1, NJ WE6-4700

NEWARK WIRE CLOTH CO. ..... 301 Verona Ave., Newark 4, NJ HU5-7700

Ala	Consolidated Engineering Co. ..... Birmingham 9	TA9-1021
Cal	Pacific Metals Co. Ltd. ..... 1800 3rd St., San Francisco 7	UN3-4000
Cal	Pacific Metals Co. Ltd. ..... 5107 S Garfield Ave., Los Angeles	BA5-5421
Ga	Consolidated Engineering Co. ..... 3072 Peachtree Rd. NE, Atlanta 5	CE7-1000
Ill	Hanscomb Pollenzig Co. ..... 105 N Canal St., Chicago	CE6-1040
Mich	Glass Co., Inc. ..... 13600 W 8 Mile Rd., Detroit	DE1-4070
Mo	H. D. Butts & Sons ..... 3210 S Hamilton Ave., St. Louis 8	VO6-4000
NY	Metallic Operations, Inc. ..... Box 175, Wantagh	WA5171
Ohio	Hess Equipment ..... 1700 Sherlee Rd., Cincinnati 37	MU1-4700
Pa	W. S. Gates ..... 33 Circle Rd., Levittown	WO-7704
Tex	R. H. Brown ..... Box 1070, Houston 1	HA6886
Utah	Pacific Metals Co. Ltd. ..... 502 W 6th St., Salt Lake City	DA5-2401

NEWBROOK MACHINE CORP. Silver Creek, NY TE4-2644

NEWMAN, HENDER & CO. LTD. Hendersons, Brand, Gloucester, Eng HA000

Can	Newman, Hender (Can) Limited ..... 222 Royalite Bldg., Calgary, Alb.	AM5-1040
Can	Newman, Hender (Can) Limited ..... 4 Bartcliff Rd., Toronto 14, Ont.	CL5-0000

NEWPORT INSTRUMENT MOUNTING & ASSOC. (I) LTD.

	Crawley Rd., Newport Pagnell, Bucks, Eng	491

NICHOLS DIV. NUCLEAR SYSTEMS, INC.

	Box 5737, Bellevue 14, Wash	GL6-0207
Cal	D. R. Morris/A. Bonn ..... 1400 Bayshore Blvd., San Francisco 24	DE3-0970
Cal	A. Bonn ..... 1400-C Duncan Pl., Manhattan Beach	FR6-0746
Ga	J. S. Mott ..... 3390 Maple Dr. NE, Atlanta	EH1-1026
Ill	W. R. Hybis ..... 4744 N California Ave., Chicago 45	ES5-0400
Minn	L. W. Mead/ J. J. Ryan, Jnr. ..... 7 Depot Square, Lexington	VO3-0204
NY	J. Weinstein/A. Goldman ..... 400 Merrick Rd., Lynbrook	AM-9400
Pa	R. E. O'Toole ..... 611 Huntingdon Pike, Philadelphia 11	BA5-4000
Tex	R. L. Rigsby, Jr. ..... 6130 Tale Blvd., Dallas 6	EM5-0040
Wash	D. R. Morris ..... P.O. Box 6161, Seattle 88	CH4-1142

NON-LINEAR SYSTEMS, INC. 34 San Fernando Rd. San Ca, Cal BE3-1124

Cal	Non-Linear Systems, Inc. ..... 18 E Fair Oaks, South Pasadena	MU3-5705
Colo	Non-Linear Systems, Inc. ..... 970 Josephine St., Denver	DR0-0000
DC	Non-Linear Systems, Inc. ..... 1010 "C" St. NW, Washington	FR7-4010
Ill	Non-Linear Systems, Inc. ..... 1215 N Harlem Ave., Chicago	TO9-1277
NY	Non-Linear Systems, Inc. ..... 1000 Franklin Ave., Garden City	PI7-0000
Tex	Non-Linear Systems, Inc. ..... 100 Exchange Park N, Dallas	FL1-0040
Can	Associates Engineering Products, Ltd. ..... 140 Dyson Blvd., Nepean Canada, Ont	CE5-0000
Per	Power & Sensors Ltd. ..... 300 City St., San Francisco	HR5-4173

NOOTER CORP. ..... 1424 S 3rd St. St. Louis 66, Mo MA5-0000

Cal	S. T. Hoe ..... 3300 S Atlantic Blvd., Los Angeles 22	AN5-0000
NY	S. K. Oliver ..... 30 Church St., New York 7	COT-0000

NOPCO CHEMICAL CO. ..... 175 Schuyler Ave., North Arlington, NJ WY5-3000

Cal	Nopco Chemical Co. ..... 4050 Valley Blvd., Los Angeles	CA1-3200
Tenn	Nopco Chemical Co. ..... 1101 Wisdom St., Chattanooga	GE3-6011

NORDMAN LABORATORIES, FORMT Milwaukee, Wis, Wis

NORTH BRITISH STEEL FOUNDRY, LTD. Bathgate, W Lothian, Scot BA2041

Eng	Clark & Angus ..... Chandoss Cross, Newcastle on Tyne	NE22710
Eng	R. Tennant Owen ..... 151 Royal Exchange, Manchester	BL5740
Eng	Bellhouse Ltd. ..... 170 Broad St., Birmingham 15	MI8866
Eng	Bellhouse Ltd. ..... 66 Kingsway, London, WC2	CH9211
Scot	Bellhouse Ltd. ..... 102 Chambers, Sta. Sq, Harrogate	HA07047
Scot	Bellhouse Ltd. ..... 227 Bath St., Glasgow, C2	CD4400
Scot	Bellhouse Ltd. ..... 110 Hanover St., Edinburgh 2	CA0764

NORTH HILLS ELECTRONICS, INC. Alexander Pl, Glen Cove, NY OR1-5700

Cal	G. H. Vaughan Co. ..... 1000 E Foothill Blvd., Pasadena	ST3-4438
Colo	Dunne Electronics ..... 10000 Carrol Ln., Denver 20	EM4-1951
Md	Jenkins Assoc. ..... 8007 Lester Dr., Silver Spring	JU9-7866
Mass	L. E. Ingber Co. ..... 4 Oakwood Ter., Newton Centre	DR1-0574
NY	E. W. Dunn Co. Inc. ..... 300 Martin Ave., Syracuse	HO8-3055
NY	A. Clinfield ..... 59 Roberts Pl., Roosevelt	PL7-6464
NY	Industron Co. ..... 800 Northern Blvd., Great Neck	HU7-0000
Ohio	Ohio Instrument Co. ..... 7335 Winston Churchill Dr., Dayton	CH4-5744
Pa	Adler Co. ..... 8 Mitchell St., Levittown	VU6-6371
Wash	Astec Corp. ..... 10800 NE 8th St., Bellevue	GL4-5442
Can	Whitaker Electronics Ltd. ..... 1171 Whitmore Ave., Ottawa, Ont	PA2-0083
Per	Terminal Radio Inst. Ltd. ..... 240 W 17th St., New York 11, NY	CH3-4000

NORTHERN RESEARCH & ENGRG. CORP. 228 Main St. Cambridge, Mass KI7-8071

Eng	Northern Research & Eng. Corp. ..... 146 Knightsbridge, London SW7	KN1-4711

NORTON CO. 1 New Bond St. Worcester 6, Mass SU0-2511

Cal	Norton Co. ..... 2455 Lafayette St., Santa Clara	CH8-7716
Cal	Norton Co. ..... 8005 Pacific Blvd., Huntington Park	LU8-0155
Ill	Norton Co. ..... 4707 S Christiana Ave., Chicago 80	LA3-0700
Ind	Norton Co. ..... 1001 W 10th St., Indianapolis	ME7-5400
Mich	Norton Co. ..... 5400 Lincoln Ave., Detroit 8	TR6-0901
NJ	Norton Co. ..... Green & North St., Trenton	KE8-1771
Ohio	Norton Co. ..... 1300 E 40th St., Cleveland 3	HE1-0000
Pa	Norton Co. ..... 4100 Sansom Ave., Philadelphia 44	DA2-6463
Pa	Norton Co. ..... Box 9548, Fox St., Pittsburgh	HU8-7700

NORTON & CO. LTD. SIR JAMES PALMER GOULDEN HON SEC.

	Salford 3, Manchester, Eng	
Pa	Norton Engineering Co. ..... 1st Natl. Bank, Pittsburgh 22	

NORWOOD STEEL EQUIPMENT LTD.

	Hamed Way, Harlow, Essex, Eng	HAR 23057

NUCLEAR, INC. 110 Pacific St. Cambridge, Mass TR6-7717

NUCLEAR-CHICAGO CORP. ..... 200 E Howard Ave. Des Plaines, Ill VA3-6456

Cal	Nuclear-Chicago Corp. ..... 401 Cambridge Ave. Palo Alto	DA1-0702
Col	Nuclear-Chicago Corp. ..... 1003 Colorado Blvd. Los Angeles 41	CL6-6711
DC	Nuclear-Chicago Corp. ..... 903 Thayer Ave. Silver Spring, Md	JU5-2000
Ga	Nuclear-Chicago Corp. ..... 3166 Maple Dr. NE, Atlanta 5	CE7-0161
Ill	Nuclear-Chicago Corp. ..... 2900 N Lincoln Ave. Chicago 45	LO1-0200
Mass	Nuclear-Chicago Corp. ..... 701 Main St. Waltham 54	TW4-7200
NY	Nuclear-Chicago Corp. ..... 1400 E Gun Hill Rd. New York 69	TU3-2811
Pa	Nuclear-Chicago Corp. ..... 10 W Chelten Ave. Philadelphia 44	VB-2121
Tex	Nuclear-Chicago Corp. ..... 5000 N Central Expwy. Dallas 6	TA6-1400
Can	Nuclear-Chicago Corp. ..... 100 Eglinton Ave. E, Toronto, Ont	HU5-1194
Ind	C. K. Dejaiff ..... Box 188, Rome	488.066

NUCLEAR CIVIL CONSTRUCTORS LTD 15-18 Cornhill St. London E 1, Eng

NUCLEAR CONSULTANTS CORP. 9142 Manchester Rd. St. Louis 19, Mo WO2-5242

Cal	Nuclear Consultants Corp. ..... 1737 S Victory Blvd. Glendale 1	CH5-0940
Ohio	Nuclear Consultants Corp. ..... 15907 Detroit Ave. Cleveland	LA1-0918
Tex	Nuclear Consultants Corp. ..... 9716 Greenwich, Houston	JA5-5641

NUCLEAR CORP. OF AMERICA INSTRUMENT & CONTROL DIV. ..... 2 Richmond Pl. Denville, NJ

Mo	Automation, Systems Corp. ..... 111 N Jewell Ave, St. Louis 22	
NJ	R. Marshall Co. ..... 50 Hadden Ave. Camden	
Tex	Southwestern Engineering & Equipment Co. ..... 1000 Lamarque Ave. Dallas	
Utah	Applied Engineering Products Co. ..... 400 Felt Bldg., Salt Lake City	
Wash	Instrumentation & Engineering Sales & Service Co. ..... 1201 3rd Ave. Bldg., Seattle	
Wis	Automation Engineering Co. ..... 4007 W Dixon St. Milwaukee	
Can	X-ray & Radium Industries ..... 301 Davenport Rd. Toronto 5	

NUCLEAR DATA, INC. ..... 2833 N Sedgwick Way, Madison, Wis AL7-4433

Cal	Nuclear Data Inc. ..... Box 112, San Mateo	DI4-1139
Ill	C. Walsh Associates ..... Box 944, Deerfield	DE6-5000
Conn	C. Walsh Associates ..... 179 Lake Ave. Greenwich	TO9-1015
Tenn	C. Walsh Associates ..... 100 Vicenza Rd. Oak Ridge	R-1071
Tex	M. Sprague Co. ..... 4044 James Ave. Fort Worth 15	WA9-4407
Wash	R. S. Dunbar Associates ..... 1017 Norman St. Seattle 44	EA5-0545
Can	McPhar-Robertson Limited ..... 159 Bond Ave. Don Mills, Ont	BR4-6454
Eng	Leland Instruments Limited ..... 145 Grosvenor Rd. Westminster, London	
Swed	LKB Produkter AB ..... Box 12200, Stockholm 12	

NUCLEAR DECONTAMINATION CORP.

	112 Vernon St. Apollo, Pa	GR2-5401

NUCLEAR DEVELOPMENT LAB. INC.

	Box 7004, Kansas City, Mo	BE3-7092

NUCLEAR-ELECTRONICS CORP. 2920 N Broad St. Philadelphia 32, Pa BA6-2300

Cal	S. L. Pfleger Co., Inc. ..... 1020 Laurel St. San Carlos	LY1-0000
Colo	S. E. Kelley ..... 800 S 4th St. Loveland	MU7-1000
Minn	Lin Associates ..... 10 Sandstone Rd. Brighton 40	HO-0040
Mo	Automation - Systems Corp. ..... 111 N Jewel Ave. St. Louis 22	TA9-1001

NJ Maxey Associates ..... 1770 Broadway, New York CI5-0800
Wash S. C. Porter Co. ..... 1300 Poplar Pl, Seattle 44 ..... EA3-0800
Can Electrodesign ..... 5034 St. Lawrence Blvd, Montreal 11 ..... DU9-0834
Por Ad. Antonio, Inc. ..... 65 Broad St, New York 4, NY BO9-7750

NUCLEAR ENERGY LIBRARY
DIS ASSOC. ..... 60 John St, New York 38, NY BA3-8420

NUCLEAR ENERGY PROPERTY
DIS ASSOC. ..... 60 Woodland St, Hartford 3, Conn JA6-2691

NUCLEAR ENGINEERING CO. INC. 45 Bay St, Box 278, Pleasanton, Cal VI6-2707
NJ Nuclear Engineering Co., Inc. ..... Bldg. 99 NDRA, Lincoln Park, Kearny HE3-7714

NUCLEAR ENTERPRISES (G.B.) LTD Sighthill, Edinburgh 11, Scot CRA2522
Aus Long Ind. Equip. Pty. Ltd. ..... 9314 George St, Sydney, NSW
Belg Nucleotal S. A. ..... 19 Rue de Prince-sur-Loupe, Brussels 1
Den Scraum Chemisk Lab. ..... Skindergade 38, Copenhagen K
Fr S. A. E. P. ..... 38 Rue Galvani Cruz, Montrouil Seine
Ger Intrell, Ltd. ..... Schleissheim 102, Munich 23
Ger Nuklomell G.m.b.H. ..... Nuclomar Immo 484, Seligers-Chilge
Holl Nucomi N. V. ..... 76 Louis Caper Van Carnebeugh, Hague
Ital Ing. Silvio Gennon S.R.L. ..... Via Marco Bene 46, Rome
Jap Shiko Trading Co. S.A. ..... Osaka & Tokyo
Nor H. Meltzer & Co. ..... Sofiengaten 17, Oslo
S Af B. Owen Jones, Ltd. ..... Box 9933, Johannesburg, S. Africa
Swed Felico ..... Sodergaden 15, Stockholm

NUCLEAR ENTERPRISES, LTD. 230 Gerry St, Winnipeg 27, Man GP6-7091
Ohio Nuclear Chemical Co. ..... 1946 E 97th St, Cleveland 6 ..... RA1-0800
Scot Nuclear Enterprises (G.B.) Ltd. ..... Sighthill Medway, Sighthill, Edinburgh

NUCLEAR FUELS & RARE METALS CORP. 617 E 106th St, LA 21, Cal BR-5101
Idah Nuclear Fuels & Rare Metals Corp. Box 455, Pocatello

NUCLEAR LAUNDRY SERVICE INC. Box 4540, Hamden 14, Conn PL6-7946
Pa Nuclear Laundry ..... 14th & Gerald St, Jeanette LA7-1886

NUCLEAR MATERIALS & EQUIPMENT CORP.(NUMEC)
1900 Warren St, Apollo, Pa GR2-8411

NUCLEAR MEASUREMENTS CORP. 1440 N. Arlington Ave, Indianapolis 18, Ind LU6-3411
Cal C. Hermann Associates ..... Box 1179, Palo Alto DA5-0800
DC The Hildebrand Co. ..... P.O. Box 1000, Pasadena CS5-0384
Mich C. Hermann Associates ..... Box 1179, Palo Alto, Cal DA5-0800
Minn Nucleonic Distributors, Inc. ..... 79 Clifton Ave, Minneapolis MU-3027
Mich M. Vogt ..... 5017 Sunset Rd, Royal Oak LU5-3066
Mo Ammonics-Sunshine Corp. ..... 111 W Jewel Ave, St. Louis 30 ..... TA3-1083
NJ McDonald Sales Co. ..... Dolton Dr, Morrville Grove TI5-1066
NY W. H. Kramer ..... Box 164, Levittown PE3-0445
Wash C. Hermann Associates ..... P.O. Box 1179, Palo Alto DA5-0800

NUCLEAR METALS, INC. ..... Box 202, Concord, Mass EM9-6410

NUCLEAR POWER GROUP ..... Knutsford, Cheshire, Eng. ..... KN5 [illegible]

NUCLEAR PRODUCTS CO. ..... 10825 Sussex Rd, Cleveland 10, Ohio GL1-0840
Cal W. D. Wilson Co. ..... 1318 Mission St, S Pasadena MU3-3027
Ill Rensselaer Valve & Fitting Co. ..... 6600 S Pulaski Rd, Chicago 29 ..... LU1-0800
La Capital Valve & Fitting Co. Inc. ..... 3000 Wyandotte St, Baton Rouge EL5-0600
Mass Cambridge Valve & Fitting Co. ..... 420 Rossmore Rd, Framingham TE5-2021
NJ R. S. Cross & Co. ..... 1387 Globe Ave, Mountainside AD5-4444
NY C. K. Pearson Co., Inc. ..... 108 Wilson Rd, N Rochester MO8-8383
Ohio Albert Valve & Fitting Co. ..... 1015 E 36th St, Cleveland MA1-7530
Pa Pegleman & Co., Inc. ..... 5040 Willow Ave, Pittsburgh LE1-5040
Pa Penn Valve & Fitting Co. ..... 810 Byers Ave, Charleroi BA5-1080
Tenn Ridge Valve & Fitting Co. ..... 6614 Kingston Pk, Knoxville 8-4884
Tex T. A. Reed & Co. ..... Box 6005, Houston 5 ..... JA6-4800
Va Diner Valve & Fitting Co. ..... 1814 Dinwiddie Rd, Richmond 30 ..... AT5-8561

NUCLEAR RESEARCH APPLICATIONS LTD. Bell St, Reigate, Surrey, Eng RE2241

NUCLEAR RESEARCH ASSOCIATES, INC. 38-12 Bowne Pl, Ave. LIC 1, NY RA1-2010

NUCLEAR RESEARCH CHEMICALS, INC.
700 N Crystal Lake Dr, Orlando, Fla
DC T. E. Wallace Co. ..... 1000 M St, Washington 6 ..... FE3-1080

NUCLEAR RESEARCH CORP. ..... Southampton, Pa EL2-0966
NJ Radio Corp. of America ..... Bldg. 15-1, Camden 2 ..... WO6-4000

NUCLEAR SCIENCE & ENGINEERING CORP. Box 10001 Pittsburgh 36, Pa. GR2-4000

NUCLEAR SERVICE LABS. INC. Box 1000, Knoxville 1, Tenn 37-5475

NUCLEAR SHIELDING
SUPPLIES & SERVICE, INC. ..... 175 Main St, White Plains, NY BR5-1254

NUCLEAR TECHNOLOGY CORP. 35 Church St, White Plains, NY WH9-0060

NUCLEAR UTILITY SERVICES, INC.
1025 Conn. Ave. NW, Washington 6, DC ST3-3800

NUCLEONIC CORP. of AMERICA 756 Bogart St, Brooklyn 37, NY HA4-2279
Minn Dynamics Co. ..... 1 Park Ave, Minneapolis MI5-0800
Md Jordon & Associates ..... 8007 Lenier Dr, Silver Spring JU5-7080
Mo Leonard Associates, Inc. ..... Box 8007, Kansas City HO-8010
Tex Southwestern Engineering & Equip. Co. ..... 4046 Lemmon Ave, Dallas LA8-7080
Wash G. M. Gilbert & Assoc. ..... 4021-7th Ave. S, Seattle MA9-0715
Can Canadian Research Institute ..... 80 Carlow Dr, Don Mills, Ontario 447-3181

NUCLEONIC PRODUCTS CO. 2133 E 12th St, Los Angeles 21, Cal AR8-3464
Ill Precor Sales Co. ..... 8401 W Diversey Ave, Chicago 47 ..... HU9-5700
NY S. S. Egert Co. ..... 97 South St, New York 10 ..... WO4-0000

NUKEM, GmbH. ..... Wolfgang bei Hanau/Main, Germany
NY Trans Continents Inc. ..... 400 5th Ave, New York 36 ..... CH4-0334
Arg Guillermo Keller Sas, F. A. Fedowitz Centenera 3345, Buenos Aires 897890
Belg Office Comm. Technique ..... 84 Chaussee de Haecht, Brussels 17.00.30
Den A. Thomsen & Co., A/S ..... Kristeve 15, Kopenhagen 5 ..... AS1018
Eng Bush Beach & Segner Bayley Ltd. ..... Bracknell St, Manchester 2
Ind Ind. & Agr. Supp. Co. ..... 49 Parsee St, Fort, Bombay 253440
Ital Eigenmann & Verraatti, S.p.A. ..... Piazza S Maria Beltrade 6, Milan 8866
Jap C. Cannon & Co., Ltd. ..... 2-Chome, Ginza Nishi, Chuo-Ku, Tokyo ..... (561)7161-0
Neth R. S. Stokvis & Zoons ..... Westzeedijk 347, Rotterdam CH8040
Nor Sylong & Sylong ..... Kongsgt. 6, Oslo 33 33 95
Swed Bergman & Beving, A.B. ..... Karlavagen 70, Stockholm - 30 ..... 07 12 00
Swit W. Sauter ..... Rennweg 9/Bahnhofplatz, Zurich 1 242323

NUMBERG THERMOMETER CO., INC.
126 Livingston St, Brooklyn 1, NY TR5-2800

OAK RIDGE NATIONAL LAB.
ISOTOPE SALES DEPT. ..... Box X, Oak Ridge, Tenn 483-8611

OAK RIDGE TECHNICAL ENTERPRISES CORP.
Box 1238, Dept. NUSCI, Oak Ridge, Tenn 483-4483
Cal West Coast Scint. Ele & Inst. Co. ..... 270 69th St, Oakland 18
Tenn Ridge Instrument Co. ..... 140 E. Division St, Oak Ridge
U. K. Nuclear Enterprises (GB) Ltd. ..... Sighthill Medway, Sighthill, Edinburgh, Scot.

OAKITE PRODUCTS, INC. ..... 19 Rector St, New York 6, NY
Cal Oakite Products, Inc. ..... Los Angeles 22 ..... MA5-1044
Conn Oakite Products, Inc. ..... 410 Asylum St, Hartford 3 ..... CH5-0880
Ga Oakite Products, Inc. ..... 417 Palmer Bldg, Atlanta 3 ..... MO5-1996
Ill Oakite Products, Inc. ..... 400 N Michigan Ave, Chicago 11 ..... MO4-0800
Mich Oakite Products, Inc. ..... 6-150 Gen. Motors Bldg, Detroit 2 ..... TR6-0800
Mo Oakite Products, Inc. ..... 400 W 10th St, Kansas City 11 ..... WE1-0819
Mo Oakite Products, Inc. ..... 111 S Bentons Ave, St. Louis 5 ..... PA5-0800
NY Oakite Products, Inc. ..... 315 Alexander St, Rochester 4 ..... BA5-3277
Ohio Oakite Products, Inc. ..... 604 Euclid Ave, Cleveland 14 ..... CH1-0273
Pa Oakite Products, Inc. ..... 42 S 15th St, Philadelphia 3 ..... LO7-7080
Pa Oakite Products, Inc. ..... 720 Washington Rd, Pittsburgh 20 ..... LO1-4611
Tex Oakite Products, Inc. ..... 1800 Main St, Dallas 1 ..... RY-1080

OCEAN TRANSPORT CO ..... 1 Drumm St, San Francisco, Cal YU2-0800

OERLIKON ENGINEERING CO. Zurich 58, Switzerland ..... [illegible]
Cal Cannon Ele. ..... Cannon Ts 13-03, Bogota
Arg. Oerlikon Soc. Arg. de Ren. Ind. ..... Ave. Roque Saenz Pena 543, Buenos Aires
Belg Societe Belge Oerlikon ..... 13 rue Belliard, Brussels
Bras Soc. Bras. Oerlikon de Maquinas Ltda. ..... Rua Buenos Aires 43, Rio de Janeiro
Can Oerlikon Canada Ltd. ..... 9405 Lorenzo Rd, Montreal 16
Eng Adam ..... Victorialine, Southampton Rd, London WC
Fr Societe Oerlikon ..... 13 rue de Milan, Paris 9
Ital Lanen & Toeles Ltd. ..... Modena Rd, New Delhi 1, Box 303
Ital S. E. T. I. ..... Via L. Ariostostrat 36, Milano
Jap H. Winter ..... Central Box 613, Tokyo
S Af A. M. Jungen (Pty) Ltd. ..... 500 Market St, Johannesburg
Spa Sociedad Espanola Oerlikon ..... Calle San Bernardo 17, Madrid

OHIO INJECTOR CO. ..... 338 Main St, Wadsworth, Ohio PE4-1501
Cal Ohio Injector Co. ..... 330 Montgomery St, San Francisco 4 ..... GA3-1200
Ga Ohio Injector Co. ..... 604 Cant Way, NW, Atlanta 5 ..... ML4-3080
Ill Ohio Injector Co. ..... 905 W Washington, Chicago 6 ..... FR2-9784
Mich Ohio Injector Co. ..... 12700 Mount St, Detroit 30 ..... TE4-5040
NY Ohio Injector Co. ..... 500 5th Ave, New York 36 ..... LA4-6238
Ohio Ohio Injector Co. ..... 600 Mayo Bldg, Tulsa 3 ..... LO5-8800
Pa Ohio Injector Co. ..... Pittsburgh HU-6115
Pa Ohio Injector Co. ..... 1014 Barclay Bldg, Bala Cynwyd GR7-7040
Tex Ohio Injector Co. ..... 5000 Canal St, Houston 3 ..... CA5-5831

OHIO NUCLEAR, INC. ..... 2700 Lakeshore Rd, Cleveland 40, Ohio YU1-4200

OHIO SEMICONDUCTORS, INC. ..... 1206 Chesapeake Ave, Columbus 12, Ohio HA4-7541
Cal B. Kalmus Co. ..... 618 California St, Burlingame BU4-7111
Cal Ray Electronics, Inc. ..... 6600 Sunset Blvd, Hollywood 46 ..... OL5-8540
Fla W. T. Hemminger Co. ..... 684 NE 79th St, Miami 38 ..... PL5-0340
Ill M. Shore ..... 7850 Clover Ave, Chicago 48 ..... OR5-7000
Ind R. D. Wiswell & Associates ..... 6003 Washington St, Indianapolis 19 ..... FL4-8276
Mass Electronic Components & Devices ..... 30 Huntington Ave, Boston 16 ..... KE9-8081
Mo McDowell Refrigerator Sales Co. ..... 1300 E Armour, Kansas City HE5-1400
NY Redford Corp. ..... 500 Saunders St, Scotia EX9-1234
NY F. Tylinski Co. ..... 70-00 Bell Blvd, Bayside 64, Queens HA4-0007
Pa Tyler Griffin Co. ..... 30 S Pulaski Rd, Devon MU9-4051
Wash Sumnoin, Inc. ..... 1017 Norman St, Seattle 44 ..... EA5-8545
Wis R. A. Dickinson & Associates ..... 4137 Green Bay Ave, Milwaukee 8 ..... CO4-1080

OHMART CORP. ..... 7256 Hagen St, Cincinnati 14, Ohio HA1-2082
Cal Crown Boddey Engineering, Inc. ..... 3400 Riverside Dr, Los Angeles 39 ..... NO5-1261
Colo BECO-Equipment Specialties Co. ..... 171 Valleje St, Denver 29 ..... SH4-5797
Ga L. M. Crown Co. ..... 111 Tumble Tumson NW, Atlanta 5 ..... CE7-0800
Ill Ryan Services, Inc. ..... Box 188, Mt. Prospect CL6-2400
La Williams Equipment Co. ..... 1600 Belden Ln, New Orleans 23
Minn Ramsey Engineering Co. ..... 1300 W County Rd. C., St. Paul 13 ..... MI3-8180
Mo The S. S. Miller Co. ..... 10127 Manchester Rd, St. Louis YO6-0800
NJ G. H. Birdall Co. ..... Box 84, Westfield AD5-3000
Ohio Premier Valve & Equipment Co. ..... 4017 Rocky Fork Rd, Cleveland 24
Pa Penn-Del Instrument Sales Co., ... 700 Bethlehem Pk, Philadelphia 18 ..... CH7-1700
Pa Silmone Products Co., Inc. ..... 1001 Penmont Ave, Pittsburgh 16 ..... LO5-4000
Tex Pan Tech Engineering Co. ..... 3000 Mercer St, Houston 27

OHMITE MFG. CO. ..... 3668 Howard St, Skokie, Ill OR5-2600
Ariz Herlin-Kain Co. ..... 5017 N 7th St, Phoenix AL6-7000
Cal Instrumentor & Pneuch ..... 3044 El Camino Real, Palo Alto DA1-0800
Cal Oberto Manufacturing Co. ..... 1000 N Grover St, Hollywood 38 ..... HO6-3434
Ind F. C. Valentine, Inc. ..... 811-815 Ft. Wayne Bank Bldg, Ft. Wayne 2 ..... AN5229
Mich Oberto Manufacturing Co. ..... 16101 Grand River, Detroit 40 ..... KE7-3000

Minn F. R. Tangeny, Inc. ..... 55 Huntington Ave, Boston 16 ..... CO6-7700
Mo H. A. Boss & Co. ..... 1001 Cherry St, Kansas City 6 ..... BA1-0600
NJ Ohmite Manufacturing Co. ..... 218 Dragon Blvd, Palisades Park WY1-7777
NY Ohmite Manufacturing Co. ..... 3700 East Ave, Rochester 18 ..... BS5-1000
Ohio Ohmite Manufacturing Co. ..... 11177 Euclid Ave, Cleveland 17 ..... PY1-7000
Pa R. K. Mandwell, Inc. ..... 1201 Spruce St, Philadelphia 3 ..... KI5-1300
Wash Mash Agencies, Inc. ..... 5001 1st Ave, Seattle 1 ..... MA5-9700

OLSON FILTRATION ENGINEERS INC.
AMER. LDY. MACHY. CO. ..... 3024 Euclid Ave, Cleveland 12, Ohio EU1-2000

ONAN DIV. BORGWARNER CORP. Minneapolis, Minn
Cal Bemsly Corp. ..... 14027 Vermont Blvd, Los Angeles OT9-0001
Ill Bemsly Midwest ..... 6000 Northwest Hwy, Chicago EP6-1404
Mass J. I. Costello Co. ..... 181 Clarendon St, Boston CO6-0000
Minn L. Murphy & Associates ..... 7700 Bonnapin Ave, Minneapolis FE9-0001
NY V. J. Brown Co. ..... 50 Kenmore Ave, Syracuse HO6-8101
NY Bemsly Corp. ..... 2 Penn Pl, Pelham LO6-0000
Ohio Bemsly Ohio ..... 1400 E Mcmillan St, Cincinnati RL3-1811
Pa Bemsly Co. ..... 1041 Arch St, Philadelphia EV5-4040

ON MARK COUPLINGS ..... 4400 York Blvd, Los Angeles 41, Cal CL4-2201

ONTARIO RESEARCH FOUNDATION 43 Queen's Park, Toronto 5, Ont. WA4-4201

OPTICAL WORKS, LTD. ..... 22 The Mall, Ealing W5, Eng EAL5471

OPTICS TECHNOLOGY, INC. ..... 340 Kaiser Blvd, Belmont, Cal LY1-8200
Cal Optics Technology, Inc. ..... 10123 Santa Monica Blvd, Los Angeles 24 ..... GR6-4201

OREGON METALLURGICAL CORP. Box 484, Albany, Ore WA6-4001

ORENDA ENGINES, LTD. ..... Box 4010, Tem. A, Toronto, Can RU6-4071
Cal Telaflex Inc. ..... 10014 Pioneer Blvd, Norwalk FT9-0800
Cal A. V. Ser Ann Comp Ltd. ..... 8001 Sepulveda Blvd, Los Angeles OR8-8101
Pa Telaflex Co. Ltd. ..... Box 2111, Hawk Wales CO2-4001

ORR & SEMBOWER, INC. ..... 1314 Hampstone Rd, Reading, Pa FR5-4241

OVERPELT-COMEL & DE COMPAGNIE S.A. CIE DES METAUX
24 rue des Fabriques Brussels, Belg. 12.31.30

PCA ELECTRONICS INC. ..... 16799 Schoolcraft St, Sepulveda, Cal EM3-6911
Arizi Pyrco Engineering Sup. ..... 470 N Scottsdale Rd, Scottsdale WE5-2201
Cal Dean Electronics Inc. ..... 1070 Laurel St, San Carlos LY1-4000
Cal Humphrey, Inc. ..... 3000 Comm St, San Diego AC9-1064
Fla E. C. Raymond & Associates ..... 5000 Seminole Rd, Madeira Beach WA1-9700
Ill L. W. Beier Co. ..... 6010 W North Ave, Chicago EU7-5400
Mass Roebuck Engineering Sales Co. ..... Braintree VO7-0840
NY R. P. Lane & Co. ..... 7 Southwood Rd, Summit CO5-0010
NY H. C. Johnson Agencies, Inc. ..... 111 Mount Hope Ave, Rochester 10 ..... BA4-1500
Ohio Scott & Sorlien, Inc. ..... 1300 Euclid Ave, Cleveland 15 ..... TO5-0800
Tex W. T. Hoskinson Associates ..... 5440 Timberview Rd, Dallas 39 ..... FL3-6800
Tex W. T. Hoskinson Associates ..... P.O. Box 12075, Dallas 39 ..... FL3-6800
Por Dage Corp. ..... 319 E 44th St, New York 17 ..... MU9-9100

PACE ELECTRICAL
INSTRUMENTS CO., INC. ..... 76-21 86th St, Glendale 27, NY VE4-0200
For Sales Representatives see Precision Apparatus Co. Inc.

PACIFIC COAST ENGINEERING CO. PO Drawer E, Alameda, Cal LA3-6100
NY Pacific Coast Eng. Co. ..... 51 E 42nd St, New York 17 ..... OX7-1475

PACIFIC PUMPS, INC. ..... 1710 Bishop St, Huntington Park, Cal
Cal Pacific Pumps, Inc. ..... 417 Market St, San Francisco 5 ..... YU1-1370
Ga Pacific Pumps, Inc. ..... 3160 Maple Dr, NE, Atlanta 5 ..... CE3-4000
Ill Pacific Pumps, Inc. ..... 72 W Monroe St, Chicago 3 ..... FR2-0712
La Pacific Pumps Inc. ..... Box 80, Baton Rouge
NY Pacific Pumps, Inc. ..... 122 E 42nd St, New York 17 ..... OX7-0800
Ohio Pacific Pumps, Inc. ..... 4300 Euclid Ave, Cleveland 3 ..... EU1-3770
Okla Pacific Pumps, Inc. ..... 1400 S Sheridan Ave, Tulsa 12 ..... TR9-0001
Pa Pacific Pumps, Inc. ..... 1621 Market St, Philadelphia 3 ..... LO7-7070
Tex Pacific Pumps, Inc. ..... 1613 Ovid St, Houston 10 ..... CA5-0000

PACIFIC SEMICONDUCTORS, INC.
12955 Chadron Ave, Hawthorne, Cal OS5-4771
Minn Pacific Semiconductors, Inc. ..... 1490 Selby Ave, St. Paul 4 ..... MI1-0001
Mo Pacific Semiconductors, Inc. ..... 3100 Kingsley Dr, Florissant MA1-4000
Pa Pacific Semiconductors, Inc. ..... 94 Township Line Rd, Philadelphia 17 ..... OS-0000
Tex Pacific Semiconductors, Inc. ..... Box 6047, Dallas EF7-1000
Eng M. C. P. Electronics, Ltd. ..... 66, Strand, London, W.C. 2 ..... WE1191
CA Harvey International, Inc. ..... 1300 Venice Blvd, Los Angeles 15 ..... RA-1811
Por Mc-Jaine & Products Co. ..... 38 Wall St, New York 5, NY WH4-8970

PACIFIC TRANSDUCER CORP. 1030 29 Pico Blvd, Los Angeles 54, Cal CR5-7224

PACIFIC VALVES, INC. ..... 2201 Walnut Ave, Long Beach, Cal GA4-8271
Cal Pacific Valves, Inc. ..... 6075 Landquist, Emeryville OL4-3333
Ill Pacific Valves, Inc. ..... 5004 S 27th, Chicago FR-7041
Mass Pacific Valves, Inc. ..... 30 Cummings Rd, Brookline BA4-3067
Mo Pacific Valves, Inc. ..... 2700 Washington Ave, St. Louis JE-7700
NJ Pacific Valves, Inc. ..... 101 Bennet Ave, Woodbury TO5-7300
NY Pacific Valves, Inc. ..... 30 E 40th St, New York LE9-0812
Ohio Pacific Valves, Inc. ..... 20800 Center Ridge Rd, Cleveland EDG-1322
Ohio Pacific Valves, Inc. ..... 901 Midtown Bldg, Tulsa CZ7-3300
Pa Pacific Valves, Inc. ..... 300 6th Ave, Pittsburgh 22 ..... EX1-0400
Tex Pacific Valves, Inc. ..... 5000 W 20th, Houston OR3-8831
Wash Pacific Valves, Inc. ..... 1000 White-Henry-Stuart Bldg, Seattle MU5-4300

PACKARD INSTRUMENT CO., INC. Box 428, La Grange, Ill. HU2-4220
Cal Packard Instrument Sales Corp. ..... 1700 Irving St, San Francisco 22 ..... MO1-1443
Cal Packard Instrument Sales Corp. ..... Box 90402, Airport Sta, Los Angeles 45 ..... PR4-3000
DC Packard Instrument Sales Corp. ..... 6307 Lockhaven Rd, Bethesda, Md EM5-2224
Ga Packard Instrument Sales Corp. ..... Box 742, Decatur HE5-3420

Minn	Packard Instrument Sales Corp.	Box 395, Minneapolis	MI3-5544
NM	Packard Instrument Sales Corp.	816 Washington St. NE, Albuquerque	266-7271
NY	Packard Instrument Sales Corp.	200-21 48th Dr, Jamaica 86	AX3-3600
Pa	Packard Instrument Sales Corp.	Box 336, Hatfield, Pa	HA9-5005
Pa	Packard Instrument Sales Corp.	Box 17271, Pittsburgh 30	WE3-7020
Tex	Packard Instrument Sales Corp.	4338 Greenville Bldg, Dallas	LA3-1091
Tr	Packard Instrument Sales Corp.	3 Square Garage, Paris XIII	
Switz	Packard Instrument Intl, S. A.	Talstr. 58, Zurich 1	23 80 21

PAGE CORP. ..... Glen Cove, NY 001-4000

Cal	Tidmer Engineering Co.	16 Beale St, San Francisco 5	YU6-5500
Colo	Davis & Davis	504 Mining Exchange Bldg, Denver	AL3-8410
Conn	The Cor Co.	119 Ann St, Hartford 3	CY7-0205
Fla	K. L. Diller & Associates	2707A E Atlantic Blvd, Pompano Beach	WH1-2705
Ga	Abernathy-Thomas Engineering Co.	522 14th St, NW, Atlanta 18	TR4-6501
Mich	H. A. Reed Co.	18400 Joann Conner Hwy, Detroit	WA3-6900
Minn	The Industro Co.	6804 Walker St, Minneapolis 26	WE3-6554
Mo	R. Gannon Co.	6907 Bridgeport Ave, St. Louis 19	WO6-1770
NY	Tidmer Corp.	135 Chestnut St, Rensselaer Park	CH5-8400
Ohio	The Lester Johnson Co.	5509 E 158rd St, Cleveland 4	SK3-7040
Okla	The Credit Co.	5120 S Winston, Tulsa 58	MU3-6601
Tex	Paul-Credit Co. Inc.	1405 Lothrit St, Houston 55	JA5-1900

PAHAC EQUIPMENT, LTD. ..... Schwabenhaus Ind Est Redhill, Surrey, Eng

PAHELLIN DIV. III, INC. ..... 7401 N Beulin Ave. Skokie, Ill OR5-2300

Ind	Pacelin	19th & King Sts. Wilmington	OL3-6104
La	Pacelin	635 Laurel St, Baton Rouge	DE3-7589
NY	Pacelin	60 E 42nd St, New York	OX7-0841
Tex	Pacelin	Prudential Bldg, Houston 25	JA3-6400

PAHELLYTE DIV. ST. REGIS PAPER CO. ..... Kalamazoo Ave. Trenton, NJ EX3-2101

Cal	Electrical Specialty Co.	5200 E 12th St. Los Angeles	AN8-6511
Conn	Pacelyte Division	9404 Whitney Ave. Hamden	CH8-5910
DC	Pacelyte Division	6021 Woodmont Ave. Washington	OL4-8916
Ill	Pacelyte Division	7054-18 N Ridgeway Ave, Skokie	JU5-5000
Mass	Pacelyte Division	147 Camp St. Brockton	AY5-8571
Mich	Pacelyte Division	16201 W McNichols St. Detroit 35	BR3-8840
Mo	F. R. Moore Co.	9631 Wayne Industrial Park, St. Louis 26	WO5-4207
NY	Pacelyte Division	500 Lexington Ave. New York	OX7-6400
Ohio	Pacelyte Division	1750 Section St. Cincinnati	SL3-1410
Ohio	Pacelyte Division	5707 Chester Ave. Cleveland	EX1-5130
Tex	Cadillac Plastics & Chemicals Co.	1040 Irving Blvd. Dallas 7	EV1-7944
Wis	Kessler & Smith	1204 W Wisconsin, Milwaukee	EB-4001

PAHTAK LTD. ..... Vale Rd. Windsor, Berks, Eng ..... WINDSOR

PAHTAFRAM LTD. ..... 5A Princes St. Hanover Sq, London W1, Eng ..... MAY. 8822

Aust	Amalgamated Wireless (Aust) Ltd.	47 York St, Sydney	2-0000
Belg	Kuepers & Co.	6 Stadhouderskade, Amsterdam W.I, Ned	020211
Bras	Pancenter S.A. Cabo	Postal 8024, Sao Paulo	
Den	Sander & Hachmann	Tuglvertsgade 22, Copenhagen	01 20 00 11
Fin	Insinoor Oy	Mikonkatu 13 A, Helsinki	
Ger	Hartmann GmbH.	Fasanen 16, Dusseldorf	120 77
Holl	Kuepers & Co.	6 Stadhouderskade, Amsterdam W.I	020211
India	Excom Ltd.	Connaught Circus, New Delhi	44 45
Ital	Ringard & Pontinelli	Via C. Manzoni, Bologna	242 227
Lux	Kuepers & Co.	6 Stadhouderskade, Amsterdam W.I, Holl.	020211
Spa	Technicas Mecanicas S.A.	Genova 42, Madrid 1	25 00 05
Swed	Inkomjakt A/B	Hedar Vedgen 5, Gala	08 22 02 25

PAH-METAL PRODUCTS CORP. 32-42 48th St. L.I.C 1, NY AS6-8005

PAHAPLASTICS MFG. CO. INC. 304 Tout Rd. Bensenville, Ill PR6-0250

PAHKER AIRCRAFT CO. ..... 5227 W Century Blvd. LA 45, Cal OR6-1271

Cal	D. R. Faulkner	6600 Royal Meadow Rd. Sherman Oaks	ST3-6665
Colo	A. P. Swanstrom	5687 S Peabody Dr. Littleton	PY3-5990
Ga	W. E. Sharp Jr.	3706 Timberlane Tce. NE, Atlanta	SH8665
Kan	J. L. Fields	6 English Ave, Wichita 9	MU3-1240
Mo	H. Sykes	618 Humphrey Pl, St Louis 35	JA1-0104
NY	E. R. Jones	130 Edgewater Ave, Bayport	LA3-0340
Ohio	F. G. Gickleman	401 W Main Rd, Dayton 10	AX8-2007
Wash	G. T. Assen	6015 NE 42nd St, Seattle	AL5-6414

PARLOW CORP. ..... Dept. 9005-B, New Hartford, NY NY7-2222

Cal	Pacific Scientific Co.	705 Harrison St. San Francisco	DO2-5504
Cal	Pacific Scientific Co.	4305 Chelsea St. Los Angeles	EU5-5220
Conn	Sear Engineering Inc.	Box 1544, New Haven	AT9-1330
Ill	Vinn & Conway Inc.	6216 S Western Ave. Chicago	WA5-5902
Mass	Sear Eng. Inc.	Box 47, Waltham	TW5-0200
Mich	G. Rohling Inc.	5000 W. Grand, Detroit	TR6-8300
Mo	Sundstrom Equip. Co.	5000 Big Bend Blvd. St. Louis	FT1-0402
NY	A. M. Stark Inc.	5001 Central Ave, Union City, NJ	4-2240
NY	E. Sadbach	Box 50, Kenmore Sta, Buffalo	284054
Ohio	Sinco & Co.	5913 W 55 St. Cleveland	TO7-4900
Pa	A. M. Stark Inc.	11 West Ave. Wayne	MO8-4000
Pa	Wagner-McKnight Co.	1310 Highland Bldg. Pittsburgh	EM1-0900

PATTERSON PUMPOY & MACHINE CO. East Liverpool, Ohio PR5-2400

Cal	M. O. Gore & Co.	World Trade Center, San Francisco 11	YU6-1801
Cal	R. E. Gulland	4710 Crenshaw Blvd, Los Angeles 43	AX8-0211
Ill	W. A. Corr	228 N Central Ave, Chicago 44	EB-0200
Ind	P. L. Dolan	1000 Court Square Bldg, Hartmann 2	RU-0777
Mich	H. Holland & Son, Inc.	10400 Fenkes Ave, Detroit 38	BR3-0060
Mo	J. R. Zeuchel	7205 Manchester Ave, St. Louis 17	MY1-4000
NY	Kenneth S. Valentine, Inc.	111 W 42nd St, New York 36	TW-0005
Ohio	R. E. Wilkerw	5400 Ashley Rd, Cleveland 30	TY0-5545
Ohio	J. H. Adner	207 E 4th, Cincinnati 2	PR1-2220
Pa	J. Spence	1324 Elbridge St, Philadelphia 49	HO-3422
Pa	C. H. Gee	305 Seventy Rd, Pittsburgh 10	FO-5111
Tex	Mayer Engineer, Inc.	5202 Mercer St, Houston 27	JA0-1240

PECHINEY ..... 23 Rue Balzac, Paris Rue, Fr CARS4-32

NY	Israel	230 E 42nd St. New York 17	OX7-1202
Belg	A. Adriaenssen	59 Ave, Geneve, Rhode St. Genese, Bruxelles	
Eng	Uprit Ltd.	Montagne Ln. Stanford, London E 15	
Holl	H. V. Wambeeke	Calandar 7a, Rotterdam	
Ital	A. & A. Casale	Via XX Settembre 40, Genova	
Swed	Eldmann Trading Co.	Kungsgatan 33, Stockholm C	
WGer	W. Hoenerfold	Ferdinandstr 41, Hamburg 1	

PEEBLES & CO., LTD. DOUCE, ELECTRONICS DIV.
E Pilton, Edinburgh 5, Scot GRO5201

Eng	S. Peebles & Co., Ltd.	55 Victoria St. London, S.W.1	TAS5L/4
Eng	S. Peebles & Co., Ltd.	16 Cornwall St. Birmingham 3	CE1309
Eng	S. Peebles & Co., Ltd.	Peter House, St. Peter's Sq, Manchester 1	CE8000
Eng	S. Peebles & Co., Ltd.	3 Windsor Cr. Jesmond, Newcastle-on-Tyne 2	NE21-2000
Eng	S. Peebles & Co., Ltd.	Permanent House, Headrow, Leeds 1	LE26447
Scot	S. Peebles & Co., Ltd.	55 Hydewood Sq, Glasgow C. 3	CE0771
W	S. Peebles & Co., Ltd.	29 Windsor Pl. Cardiff, Wales	CA56668

PEELLE CO. ..... 47 Stewart Ave. Brooklyn 37, NY EV6-3000

Cal	Peelle Co.	Box 157, Sta 64, N Hollywood	HO4-6420
Ga	Atlanta Steel Erectors, Inc.	585 Hall St. SW, Atlanta 13	JA0-0241
Ill	Peelle Co.	4607 N Kedzie Ave, Chicago 18	IR8-4400
Ind	Peelle Co.	Box 811, Friends Sta, Richmond	6-1006
Mass	R D Fogarty Co. Inc.	1311 Washington St. W Newton 65	BR2-6400
Ohio	C C Hemenfold	630 Broadway, Cincinnati 2	GA1-5276
Ohio	C F Brine	405 Caxton Bldg, Cleveland 15	PR1-4000
Pa	James E Pincairn	511 Wood St, Pittsburgh 22	AT1-7544
Pa	Peelle Co.	34 S 17th St. Philadelphia	LO7-4606
Tex	R.E.L. Whitten Co.	Box 8207, Dallas 5	EM5-1201
Wash	Bradley Co.	205 White-Henry-Stuart Bldg, Seattle 1	MA4-1570
Wis	L. R. Heine	707 N Broadway, Milwaukee 2	BR1-7040

PEERLESS PUMP HYDRODYNAMICS DIV.
PHC CORP. ..... 304 West Ave. 26, Los Angeles 31, Cal CA1-3151

Cal	Peerless Pump-Hydrodynamics Div. 8 Ge St. San Francisco 5		
Ill	Peerless Pump-Hydrodynamics Div. 35 W Jackson Blvd. Chicago 4		
Ind	Peerless Pump-Hydrodynamics Div. 3000 Southwestern Ave. Indianapolis 8		
NY	Peerless Pump-Hydrodynamics Div. 37 West St. New York 5		

PEMBERTHY INSTRUMENT CO. 6701 Shepard Ave. 5, Seattle 8, Wash PA5-5400

PENTUBS MFG. CO. INC. ..... 46 Bristols St. Hartford, Conn DE3-1094

Cal	The E. Wadell Co.	3007 Park Blvd, Palo Alto	DA1-8420
Ill	Cole-Parmer Instrument & Equip. Co.	1020 N Clark St. Chicago	SU7-1000
Mass	Industrial Plans & Equip. Corp.	11 Mitchin Dr. Woburn	WE3-1714
NY	Acrolo Sales Corp.	570 5th Ave. New York	OR6-0320
NY	Maitland Co.	220 Central Ave. Dpt.	WO1-6060

PENN PRINT & SPECIALTY CO. 2020 E Monmouth St. Phila 24, Pa ER9-4242

PENN RARE METALS, INC. ..... Box 1-A, Revere, Pa PE4-3771

NY	Kowecki Chemical Co.	200 E 42nd St. New York 17	MU5-7140

PENNALT CHEMICALS CORP. 3 Penn Center, Philadelphia 2, Pa LO4-6000

PENNA THERMOMETER & PARGERT, INT. CAS. INS. CO. ..... 1900 Derry St. Harrisburg, Pa CE4-0041

Ind	Pa Thermometer & Pargeter Ins. Co. Inc. Ch. 33 S Calhoun St. Fort Wayne		UE3-4777
NC	Pa Thermometer & Pargeter Ins. Co. Inc. Ch. 1000 Sutherland Ave. Greensboro		BR4-4231
SC	Pa Thermometer & Pargeter Ins. Co. Inc. Ch. 119 S Main St. Greer		TR7-4884
Va	Pa Thermometer & Pargeter Ins. Co. Inc. Ch. 4000 W Broad St. Richmond 20		EL4-4014

PENNSYLVANIA TRANSFORMER DIV. GENERAL RADIAN CO.
Conneaut, Pa RU5-7000

Cal	J. C. Conte	415 S Juan St. Los Angeles 5	WE4-0500
Cal	G. E. Hess Co.	600 3rd St. San Francisco 7	SU1-7000
Ga	Pennsylvania Transformer Div.	385 E Paces Ferry Rd. NE, Atlanta 5	CE7-0006
Ill	R. M. Mass & Associates	1000 E 75th St. Chicago 49	MU9-8747
Mich	G. E. Hess & Co.	18707 Michigan Ave, Dearborn 7	LO1-1500
Mo	Williams & McKinley Sales Co.	10161 E 40th St. Kansas City 30	PL6-0700
NY	Pennsylvania Transformer Div.	50 Broad St. New York 4	DY4-0000
NY	Pennsylvania Transformer Div.	201-205 Erie Blvd. W Syracuse 3	HA5-0170
Ohio	H. Fisher Associates, Inc.	7015 Euclid Ave. Cleveland 3	UT1-8707
Pa	Sun Sun Electric Co. Inc.	50 Sola Ave. Sola-Cynwyd	MO4-5100
Pa	Pennsylvania Transformer Div.	Box 501, Conneaut	LO1-0100
Utah	C. W. Silver Co.	800 W 7th South St. Salt Lake City 1	EL5-8270

PERFORATED PRODUCTS, INC. 180 Normal St. Brooklyn 26, Mass HT1-4004

Cal	R. F. Gunter & Co.	1000 S Glendale Ave. Glendale 5	CH5-9700

PERKIN-ELMER CORP. ..... Norwalk, Conn VU7-4404

Cal	Perkin-Elmer Corp.	5670 E Washington Blvd. Los Angeles	PA3-4000
Cal	Perkin-Elmer Corp.	940 W Foothill Blvd, Monrovia	EL8-2540
DC	Perkin-Elmer Corp.	1025 Eye St. NW, Washington 6	ME8-8144
Ga	Perkin-Elmer Corp.	3130 Maple Dr. Bldg, Atlanta	CE7-4004
Ill	Perkin-Elmer Corp.	1 N LaGrange Rd, LaGrange	FL4-1040
Md	Perkin-Elmer Corp.	8055 13th St. Silver Spring	EM-0111
Ohio	Perkin-Elmer Corp.	20075 Center Ridge Rd, Rocky River 16	ED1-4077
Pa	Perkin-Elmer Corp.	119 Love Ln. Upper Darby	PL5-7000
Tex	Perkin-Elmer Corp.	4615 Richmond Ave, Houston 27	MA5-5400

PERKIN-ELMER CORP. ELECTRO-OPTICAL DIV.
5670 E Washington Blvd. LA 22, Cal PA3-4000

Conn	Perkin - Elmer, Electro Optical Div.	Main Ave, Norwalk	VU7-4400
DC	Perkin-Elmer, Electro-Optical Div.	1025 Eye St. NW, Washington 6	ME8-8144
Fla	Perkin-Elmer, Electro-Optical Div.	900 5th Ave. Indialantic	PA5-1040
Ohio	Perkin-Elmer, Electro-Optical Div.	Westerly Ln, Dayton	TO5-1972

PERMAG CORP. 68-02 Van Dyck Expwy, Jamaica 32, NY OL3-1000

Cal	Permag Pacific Corp.	2010 S La Cienega Blvd. Culver City	VE6-0251

PERMAGLIDE CORP OF AMERICA 36-43 56th St. Woodside, NY TW9-0700

Cal	Wilson Sales Co.	1405 Bayshore Blvd, San Francisco	JU5-1660

Fla	Lambert Corp. of Florida	2355 W Central Ave. Orlando	GA4-5971
Md	H. K. Heller	2533 Wilson Blvd. Arlington, Va.	JE9-8045
Minn	Stamm Corp.	570 Commonwealth Ave. Boston	EG6-5120
Minn	Remanitor Plastic Products Co.	2045 University Ave. St. Paul	MI5-0270
Mo	Railroad Concrete Products Co.	2724 Oxford Blvd. St. Louis	MI5-0440
NY	Permaglide Distributors of N. Y.	81 W Merrick Rd. Valley Stream	VA5-4971
Ohio	Permaglide Distributors of Ohio	4006 Schaefer Ave. Cleveland	EN1-0505
Pa	Permaglide Distributors of Phila.	5440 Chew Ave. Philadelphia	CH6-0840
Tenn	Construction Products Co.	6000 Chapman Hwy. Knoxville	EM7-0443
Tex	Mayer-Reilly Co.	M. & M. Bldg. Houston	CA5-5200
Wash	Sheldon Dunning	811 1st Ave, W, Seattle 99	AT4-7560

PERMALI INC. ..... Box 792, Mt. Pleasant, Pa EU7-2283

Cal	R. S. Hughes Co., Inc.	4615 Alger St. Los Angeles 39	CH5-0821
Cal	R. S. Hughes Co., Inc.	566 College Ave. Palo Alto	DA6-2052
Colo	R. S. Hughes Co., Inc.	2011 W 8th Ave. Denver 4	CH6-4207
Ill	J. J. Glass & Co.	606 W Washington Blvd, Chicago 6	ST3-5687
NY	Permali, Inc.	1007 Central Ave, Albany 5	HU9-7000
Ohio	J. J. Glass & Co.	4029 Temple St. Cincinnati 46	PL3-3700
Ohio	H. Putney Co.	Box 7401, Brookside Sta, Tulsa 9	GY1-6400
Wash	R. S. Hughes Co., Inc.	1309 Bailey St, Seattle 8	PA5-0700
Wis	J. J. Glass & Co.	7015 N Boyd Way, Milwaukee 17	PL3-7340

PERMATIT CO. DIV.
FRANKLIN PERMATIT, INC. 30 E 40th St. New York 16, NY MU3-4600

Cal	The Permatit Co.	4038 E Broad Blvd. Glendale 4	CH5-9236
Colo	The Permatit Co.	1455 Holland St. Denver 15	SU7-0068
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Ill	The Permatit Co.	407 S Dearborn St. Chicago	HA6666
Kan	The Permatit Co.	7041 W 75th St. Overland Park	DU1-0272
Md	The Permatit Co.	8005 Cameron St. Silver Spring	JU9-0721
Mass	The Permatit Co.	50 Kearney Rd. Needham Hgts. 94	HA4-0052
Mich	The Permatit Co.	2111 Woodward Ave. Detroit	WO2-3080
Ohio	The Permatit Co.	2300 Victory Pkwy. Cincinnati 6	AV1-0050
Pa	The Permatit Co.	201 N 33rd St. Philadelphia 4	BA5-1000
Tenn	The Permatit Co.	848 McCallie St. Chattanooga 3	AM6-4544
Tex	The Permatit Co.	4301 San Jacinto St. Houston 4	JA3-1400

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Mass	R. Parson & Co.	1090 Centre St. Boston	FA5-1000

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Ill	E. J. Lambert	111 W Washington St. Chicago 2	ST3-5120
Md	J. D. Löhey	8005 Cameron St. Silver Spring	JU9-0721
Mass	W. D. Clark	50 Kearney Rd. Needham Heights 94	HU5-5450
Mich	D. A. Bradley	700 Francis Palms Bldg. Detroit 1	WO6-0040
Mo	R. H. Schmig	633 Olive St. St. Louis 1	CE1-5580
NY	J. S. Volpi	55 Nevada St. Hawthorn	OS-1200
Ohio	J. E. Hoit, Jr.	2300 Victory Pkwy. Cincinnati 6	AV1-0000
Pa	C. M. Fleckler	22nd & Arch Sts. Philadelphia 4	BA5-7474
Pa	H. J. Green	4005 Chabree Dr. Pittsburgh 36	TU5-9973
Tex	J. P. Vordick	4301 San Jacinto, Houston 6	JA5-0505

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Ga	Phelps Dodge	960 Candler Bldg, Atlanta 3	MU6-5222
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Ind	Phelps Dodge	4400 New Haven Ave. Ft. Wayne 1	EA8611
Mass	Phelps Dodge	170 Albany St. Cambridge 39	EL4-7054
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Ohio	Phelps Dodge	80 Public Sq. Cleveland 13	PR1-2000
Ore	Phelps Dodge Copper	1400 SW 16th Ave. Portland 9	CA6-6117
Pa	Phelps Dodge	2545 W Allegheny Ave, Philadelphia 32	BA5-0000
Tex	Phelps Dodge	4110 McKinney Ave. Dallas 4	EU7-7000

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Ill	E. C. Thompson	30 N Wacker Dr. Chicago 6	ST3-8464
Md	J. F. Ottinger	4300 Wearview Rd, Baltimore	SU7-1345
NY	C. W. Lufkow	11 W 42nd St, New York City 36	BR9-4900
Pa	G. Nairn, Jr.	1201 Bankerhill St, Pittsburgh	LE1-1405
Tex	E. Wemack	4002 Travis St, Houston 2	JA5-2727

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Ill	Philadelphia Quartz Co.	205 W Wacker Dr. Chicago 6	ST3-7734

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Fla	W. A. Brown & Associates, Inc.	201 Cypress Rd. Indian River City	AM7-0411
Ill	H. Marland & Co.	6000 Lincoln Ave. Chicago 45	OR6-1100
Mass	Instrument Dynamics, Inc.	11 Albion St. Wakefield	CR6-5100
NY	D S Associates, Inc.	Box 284 DeWitt	GR-0220
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Ohio	M. F. Odell Co.	20814 Center Ridge Rd. Westlake	TE1-8000
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DC Philco Corp. ..... 806 17th St. NW, Washington 6 ..... EX3-1300
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Wash Nuclear Industries, Inc. ..... P.O. Box 6187, Seattle 88 ..... CH6-1141
Fr R.E.A.C. Export Division ..... 16 Meuse St. New York 4, NY WO6-6872

RADIATION HAZARD CONTROL CO. Fort Atkinson, Wis JO3-8871

RADIATION INSTRUMENT CO. Box 720, Silver Spring, Md

RADIATION INSTRUMENT DEVELOPMENT LAB. ..... 61 E Hunt Ave. Westfield, NJ AD1-2323
Cal R. W. Thompson Associates ..... 4106 El Camino Rd. Palo Alto DA1-4040
Conn Applied Technology, Inc. ..... 7 Vine St. Manchester, Mass JA5-3020
DC The Jay Co. ..... 5420 Wilson Blvd. Arlington 1, Va JA4-0707
Fla Ridge Instrument Co. ..... 140-20 E Division St. Oak Ridge 486-1311
Ill Central Engineering Sales Co. ..... 6071 W Roosevelt Rd. Lombard MA9-2200
Mo Radiation Engineering, Inc. ..... 4404 Pennsylvania Ave. Omaha 6, Neb LA6-4200
NM Gene Pesnch Co. ..... 7200 Zuni Rd. SE, Albuquerque AM8-2470
NY Scientific Systems Sales Corp. ..... Box 3, Depotite 03 ..... BA5-0900
Pa S & S Associates, Inc. ..... 750 DeKalb Pike, King of Prussia MO9-7150
Tex Actinet Electronic Sales Co. ..... Box 15161, Fort Worth FE9-8775
Wash R. Johnston Co. ..... 1011 E 69th St. Seattle 15 ..... LA4-5170
Fr Instrotechnique ..... 81, Rue Gerdiner, Boulogne - Billancourt MOB-30

RADIATION PRODUCTS, INC. Ft. 40th Rd. Flushing 52, NY FL3-2280
Cal C. Herrmann Assoc. ..... 8775 Mendenon Dr. San Diego ZE9702
Cal C. Herrmann Assoc. ..... 651 E. Walnut St. Pasadena MU1-6111
Cal C. Herrmann Assoc. ..... 101 Lambert Dr. Palo Alto DA5-0900
Fla Ellison Co. ..... Box 5814, Jacksonville 5 ..... EX3-6751
Ga Ellison Co. ..... 602 Healey Blvd. Atlanta 3 ..... JA5-0220
NM C. Herrmann Assoc. ..... Santa Fe TU2-0801
Ohio Engineering Specialties ..... 8102 Cleveage Rd. Cincinnati 40 ..... LO1-4800
Pa C. G. Media Co. ..... 801 W Chelten Ave. Philadelphia 44 ..... VI9-8100
Ill J. Hoey ..... 647 Broadway, Pewaukee FE9-0866
Tex Pan-Tech Engineering Co. ..... 9708 Richmond Ave. Houston 27 ..... MO6-1040
Tex C. Herrmann Assoc. ..... 5402 Ash Creek Dr. Dallas 30 ..... DA7-1970
Wash C. Herrmann Assoc. ..... 6510 40th Ave. Seattle 15 ..... LA3-0800

RADIATION TECHNOLOGY, INC. 457 Aaron St. NW, Atlanta 18, Ga GT1-3632
Cal Nuclear Industries, Inc. ..... 1485 Bayshore Blvd. San Francisco DE3-8970
Cal Nuclear Industries, Inc. ..... 1000 Duncan Pl. Menlo Park Branch PA6-8745
Ga Nuclear Industries, Inc. ..... 3220 Maple Dr. Atlanta ZE1-1816
Ill Nuclear Industries, Inc. ..... 6744 California Ave. Chicago SE8-5040
Md Nuclear Industries, Inc. ..... 6400 Fresno Rd. Orlando GL6-8841
Mass Nuclear Industries, Inc. ..... 7 Depot Square, Lexington VO8-5400
NY Nuclear Industries, Inc. ..... 10 Holland Ct. Valley Stream CO5-7100
NY Nuclear Industries, Inc. ..... 448 Merrick Rd. Lynbrook JA6-8400
Pa Nuclear Industries, Inc. ..... 801 Huntingdon Pike, Philadelphia RA6-8300

Tex Nuclear Industries, Inc. ..... 6800 Yale Blvd. Dallas EM8-6640
Wash Nuclear Industries, Inc. ..... Box 6187, Seattle CH6-1141

RADIO CORP. OF AMERICA ELECTRON TUBE DIV.
415 S 5th St. Harrison, NJ HU5-3900
Cal RCA Electron Tube Div. ..... 6801 E Washington Blvd. Los Angeles 22 ..... RA3-4381
Cal RCA Electron Tube Div. ..... 1300 El Camino Real, Burlingame OX7-1600
DC RCA Electron Tube Div. ..... 1725 "K" St. Washington 6 ..... DE7-1260
Ill RCA Electron Tube Div. ..... 1154 Merchandise Mart Plaza, Chicago WH4-2800
Mich RCA Electron Tube Div. ..... 714 Center Bldg. Detroit 2 ..... TR5-5600
NJ RCA Electron Tube Div. ..... 744 Broad St. Newark 2 ..... HU5-3900
Ohio RCA Electron Tube Div. ..... 224 N Wilkinson Blvd. Dayton 2 ..... BA5-2366

RADIO CORP. of AMERICA, INDUSTRIAL ELECTRONIC PRODUCT
Front & Cooper Sts. Camden 2, NJ WO5-3900
Cal Radio Corp. of America ..... 1000 N Vine St. Hollywood 38 ..... HO8-5164
Ga Radio Corp. of America ..... 134 Peachtree St. Atlanta JA4-7702
Ill Radio Corp. of America ..... 1154 Merchandise Mart Plaza, Chicago 54 ..... DE7-0760
NY Radio Corp. of America ..... 10 E 40th St. New York JU6-6000
Ohio Radio Corp. of America ..... 1400 Keith Bldg. Cleveland 15 ..... CE1-0450
Tex Radio Corp. of America ..... 7901 Empire Freeway, Dallas 35 ..... FL3-0311

RADIOCHEMICAL CENTRE, THE ..... White Lion Rd. Amersham, Buckinghamshire, Eng

RADIOCHEMISTRY INC. ..... 7111 W St. Catherine St. Louisville 10, Ky. .. JU7-5464

RADIOLOGICAL SERVICE CO., INC. 611 W Merrick Rd. Valley Stream, NY CO5-9641

RADIONICS INC. ..... Lafayette & Water Sts. Hackettstown, Pa BR3-5466
Cal K. Cummins ..... 880 21st St. San Pedro TE3-0810
Colo Rowley-Bowcom, Inc. ..... 651 S Jason, Denver 23 ..... WA5-5204
DC J. J. Maguire Co. ..... 702 Investment Bldg. Washington 5 ..... RA5-4347
La Gamma Industries, Inc. ..... 3256 Tod Durham, Baton Rouge DI3-3021
Mass C. T. Morgan Co. ..... 21 Lothrop St. Beverly WA5-0870
NY Nuclear ..... 700 S Fulton Ave. Mt. Vernon MO6-4600
Ohio R. L. Holliday Co. ..... 1048 Lee Rd. Cleveland 18 ..... PA1-0880
Pa R. L. Holliday Co. ..... Box 10202, Pittsburgh 24 ..... LO1-3000
Utah Rowley-Bowcom, Inc. ..... 900 Folsom Ave. Salt Lake City 4 ..... DA3-2041
Wash Avionics Liaison, Inc. ..... 8770 Pontamar Rd. S, Seattle 8 ..... PA5-7000
Can L. E. Baxter, Ltd. ..... 6071 Upper Lachine Rd. Montreal, P.Q. .. HO9-0751

RADIOTECHNIQUE, L.A. ..... 130 Ave Ledru Rollin, Paris 11e, Fr VOL15-30

RADION CHEMICAL CO., INC. .. 101 E 42nd St. New York 17, NY MU7-2180
Cal C. F. Bequesch Co. ..... 711 S Vermont, Los Angeles DU8-7987
Ill Radion Chemical Co. Inc. ..... 444 Green Bay Rd. Kenilworth AL1-7722

RAMAGE & MILLER, INC. .... 150 S 2nd St. Richmond, Cal BE4-7002
Cal The Thomas Co. ..... 3440 Ash, Palo Alto DA1-0454
Cal Wright Engineering ..... 180 E California Blvd. Pasadena ST3-1006
Conn M. S. Caldwell ..... 105 W Main St. Avon OP5-9707
Fla W. A. Brown & Associates ..... 201 Cypress Rd. Indian River City AM7-0421
Fla W. A. Brown & Associates ..... 3301 Webber Ave. Orlando GA5-1060
NY P & F Associates ..... 413 Main St. Northport CA1-7000
NY E. W. Snow Co. ..... 800 Mentor Ave. Syracuse 17 ..... HO9-9306
Tex Texas Avionics ..... 4616 Preston St. Dallas 6 ..... EM8-3080
Va W. A. Brown & Associates ..... 3010 Mt. Vernon, Alexandria TE6-1300
India R. M. Bose & Co. ..... 1st Floor, 7 Wanston St. Calcutta

RANDOLPH PUMP CO. ..... 1010 Boston St. Houston 19, Tex

RANDOM RESEARCH ..... Box 209, San Pedro, Cal TE2-7170
Cal West Eleven, Inc. ..... 3001 Sunset Blvd. LA
NY Bradley Associates ..... 9 Park Pl. New York 40
Pa C. E. Snow Co. ..... 615 Cheltenham Ave. Philadelphia 6
Tex H. T. Brown Associates ..... 2302 Boca Raton Dr. Dallas 30
Wash M. R. Smith & Co. ..... 717 Michigan St. Seattle 8

RAYSON ELECTRICAL INSTRUMENT CO. 714 Porter St. Cambridge 42, Mass KI7-4841
Mass W. M. Hagen Co. ..... 1770 Massachusetts Ave. Lexington 73 ..... VO6-7717
NY J. Williams Associates ..... 80 Main St. Orange OR6-7100

RAYBESTOS-MANHATTAN, INC. Arnold & Stagel Sts. Hazleton, Pa MO6-2251
Ala Raybestos-Manhattan, Inc. ..... 1306 N 5th Ave. Birmingham 1
Cal Raybestos-Manhattan, Inc. ..... 4801 Pacific Blvd. Los Angeles 58
Colo Raybestos-Manhattan, Inc. ..... 4600 York St. Denver 16
Ill Raybestos-Manhattan, Inc. ..... 6010 Northwest Hwy. Chicago 31
La Raybestos-Manhattan, Inc. ..... 1600 St. Ferdinand St. New Orleans 17
Mich Raybestos-Manhattan, Inc. ..... 496 Fisher Bldg. Detroit 2
NJ Raybestos-Manhattan, Inc. ..... 61 Willett St. Passaic
Ohio Raybestos-Manhattan, Inc. ..... 20800 Center Ridge Rd. Cleveland 16
Pa Raybestos-Manhattan, Inc. ..... 1326 Suburban Sta. Bldg. Philadelphia 2
Pa Raybestos-Manhattan, Inc. ..... 610 Empire Bldg. Pittsburgh 22
Tex Raybestos-Manhattan, Inc. ..... 5600 Taylor St. Dallas 96
Tex Raybestos-Manhattan, Inc. ..... 3612 Canal St. Houston 1

RAYCHEM CORP. ..... Oakside at Northside, Redwood City, Cal .. EM9-7226
Colo A. L. Williams Co. ..... 3500 S Albion St. Denver 22 ..... GL6-0440
Ill Ron Diedbert Co., Inc. ..... 5000 W Montrose Ave. Chicago 16 ..... LO1-7027
Mass Schaal Associates, Inc. ..... 11 Mossey St. Lexington
Mich Hamburg, Jones & Co. ..... 5840 W Grand Blvd. Detroit 9 ..... TR1-0800
Minn L. P. Murphy & Associates, Inc. ..... 1040 Hennepin Ave. Minneapolis 5 ..... FE6-3800
Mo R. W. Fantz Co., Inc. ..... 400 W 34th St. Kansas City 11 ..... PL3-3200
NY O. P. Marin Co. ..... 98 North Ave. New Rochelle PE9-4510
NY R. W. Taylor Co., Inc. ..... Box 222, DeWitt 14 ..... GR6-0400
Ohio Rada, Goodlad & Associates, Inc. 14700 Detroit Ave. Cleveland 7 ..... AC1-9400
Pa S. E. Macdonald, Inc. ..... 1021 Spruce St. Philadelphia 2 ..... KI6-1906
Tex J. G. Neely ..... Box 8404, Fort Worth MA8-0971
Wash D. Parker Co. ..... 2300 Poplar Pl. Seattle 44 ..... EA5-3000

RAY-O-VAC CO. DIV. ELEC. STORAGE BATTERY CO. Madison, Wis AL3-7201
Cal Ray-O-Vac Co. ..... 111 Sutter St. San Francisco 4 ..... YU8-0881
NY Ray-O-Vac Co. ..... 1770 Broadway, New York 19 ..... JU5-0480
Tenn Ray-O-Vac Co. ..... 484 S Hollywood Ave. Memphis 4 ..... BR6-8187

RAY-PROOF CORP. ..... 840 Canal St. Stamford, Conn DA5-2205
Cal C. W. Fowler Co. ..... 450 S Western Ave. Los Angeles DU6-7205
DC J. Cassidy Co. ..... 3000 8th St. NE, Washington LA5-5400
Ill W. W. Mitchell Co. Inc. ..... 840 W Randolph St. Chicago CE8-8400
Mass J. G. Wannan Co. ..... 180 Dudley St. Boston HA2-6050
Minn Seeley Sales Co. Inc. ..... 184 S 10th St. Minneapolis FE8-7084
Ohio Hunn Sales, Inc. ..... 1900 Euclid Ave. Cleveland CH1-0800
Pa Building Specialties Co. ..... 501 Century Bldg. Pittsburgh AT1-1500
Pa M. O. Lonkelin ..... 1801 Arch St. Philadelphia LO7-3035
Tenn Builder's Specialties, Inc. ..... 1100 Demon Street St. Nashville AL6-0886
Tex R. J. DeWees & Sons, Inc. ..... 3011 Maple Ave. Dallas FL7-0201
Wis J. M. Mitchell Products ..... 700 N Milwaukee St. Milwaukee BR3-8100

RAYTHEON CO.
COMMERCIAL APPAR. & SYSTEMS DIV.
225 Crescent St. Waltham 54, Mass TW9-5400
COMMUNICATIONS & DATA PROCESSING OPERATION
1415 Boston-Prov. Tpk. Norwood, Mass HO7-4700
INDUSTRIAL COMPONENTS DIV. 55 Chapel St. Newton, Mass BI4-7700
MICROWAVE & POWER TUBE DIV. SPENCER LAB. Burlington, Mass BR3-8400
RESEARCH DIV. HIGH TEMP. MATERIALS DEPT. Waltham 54, Mass TW9-5400
SEMICONDUCTOR DIV. ..... 150 California St. Newton 58, Mass DE2-7777
VOLTAGE REGULATOR & POWER SUPPLY DEPT.
Hartshorn Ave. South Norwalk, Conn VO6-2571
Cal Raytheon Co. ..... 355 N Van Ness Ave. Hawthorne FL5-3151
Cal Raytheon Co. ..... 460 El Camino Real, Redwood City EM5-5600
Fla Raytheon Co. ..... 1633 E Colonial Dr. Orlando GA5-0510
Ga Raytheon Co. ..... 3133 Maple Dr. NE, Atlanta ZE1-3810
Ill Raytheon Co. ..... 8501 Grand Ave. Franklin Park BA5-4000
Md Raytheon Co. ..... 100 Brooker Rd. Glen Burnie RC1-0600
Mich Raytheon Co. ..... 7400 2nd Ave. Detroit TR3-3800
NJ Raytheon Co. ..... 520 Sylvan Ave. Englewood Cliffs LO7-4911
NJ Raytheon Co. ..... 1206 Kings Hwy. Haddonfield HA5-1800
NY Raytheon Co. ..... 3000 James St. Syracuse HO9-5541
Ohio Raytheon Co. ..... 5055 W 117 St. Cleveland WI1-7710
Tex Raytheon Co. ..... 3011 Hall St. Dallas LA5-7001

REACTIVE METALS INC. NW NATL DISTILLERS & CHEM. CORP.
Niles, Ohio OL3-9611

REACTOR CONTROLS CO. ... Box 477, Oakridge, Tenn AM-1481

REACTOR EXPERIMENTS, INC. 140 Nuclear Blvd. Belmont, Cal LY3-7884
Cal Nuclear Industries, Inc. ..... 1000-C Duncan Pl. Menlo Park Branch PA6-8745
Cal Nuclear Industries, Inc. ..... 1485 Bayshore, San Francisco 24 ..... DE3-0970
Ga Nuclear Industries, Inc. ..... 3220 Maple Dr. NE, Atlanta 5 ..... ZE1-1816
Ill Nuclear Industries, Inc. ..... 6744 North California Ave. Chicago 45 ..... SE8-5040
Md Nuclear Industries, Inc. ..... 6400 Fresno Rd. Orlando 14 ..... GL6-8841
Mass Nuclear Industries, Inc. ..... 7 Depot Square, Lexington VO8-5400
NY Nuclear Industries, Inc. ..... 448 Merrick Rd. Lynbrook JA6-8400
Pa Nuclear Industries, Inc. ..... 801 Huntingdon Pike, Philadelphia 11 ..... RA6-8300
Tex Nuclear Industries, Inc. ..... 6800 Yale Blvd. Dallas 6 ..... EM8-6640
Wash Nuclear Industries, Inc. ..... Box 6187 Seattle 88 ..... CH6-1141

REACTOR MATERIALS INC. .. Box 472, Parkville, MY MA5-3364

READY MADE SIGN CO. ..... 115 North St. New York 12, NY WO4-2990

REBOUND CO., INC. ..... 201 Sunrise St. Geneva, Ohio GA3-5151
Cal Rebound Co., Inc. ..... 130 Illinois St. El Segundo OR6-8841
Ill Cosmic Co. of America ..... 1905 Swing Ave. Schiller Pk.
Pa Cosmic Co. of America ..... Folcroft
Tex Rebound Co., Inc. ..... 6021 Dyer St. Dallas 6 ..... EM8-6401

REEVES INSTRUMENT CORP. 7 Gate Blvd. Garden City, NY PO-2100
Cal Reeves Instrument Corp. ..... 1316 4th St. Santa Monica EX5-2000
Colo Rentbell Associates ..... 1270 S Sheridan Blvd. Denver 26 ..... WE3-6045
Ill E. Magnuson Co. ..... 3040 W Irving Park Rd. Chicago 18 ..... IR6-3013
Ky R. O. Whitsell & Associates, Inc. 3000 Rock St. Louisville GR6-3034
Mich J. L. Peirce Co. ..... 10000 James Cousins Hwy. Detroit 32 ..... UN3-0071
NM Rentbell Associates ..... 2002 Apache Ln. Alamogordo HE3-0737
NY A. E. DeCoy Agency ..... Box 73, Rome ST3-3041
Ohio R. O. Whitsell & Associates, Inc. 11430 Lorain Ave. Fairview Park 26 ..... EM6-0066
Ohio R. O. Whitsell & Associates, Inc. 2200 Louisville Ave. Cincinnati MU1-8210
Ohio R. O. Whitsell & Associates, Inc. 3600 Far Hills Bldg. Dayton AX3-4021
Tex Aero/Electronics Prods. Co. ..... Box 15071, Dallas 20 ..... FL1-4053
Utah Rentbell Associates ..... 400 S 1st N, Centerville AX3-0021
Wash Mesch Agencies, Inc. ..... 5001 1st Ave. Seattle 1 ..... MA3-0781

REICHERT-ELECTRONS GmbH Wien-Amsel-Putzberg, V Ger 2372

REICHOLD CHEMICALS, INC. 525 N Broadway, White Plains, NY WE6-4200
Ala Reichhold Chemicals, Inc. ..... Tuscaloosa PL3-2052
Cal Reichhold Chemicals, Inc. ..... 227 Adair Ave. Azusa CO5-4120
Cal Reichhold Chemicals, Inc. ..... Linden Ave. S San Francisco PL5-2020
Colo G. C. Brunk, Inc. ..... 1040 Blake St. Denver 2 ..... TA5-2071
Ill Reichhold Chemicals, Inc. ..... 7730 W 61st Pl. Argo GL8-0400
Mass Reichhold Chemicals, Inc. ..... Box 338, Bellingham OR5-0800
Mich Reichhold Chemicals, Inc. ..... 401-791 Woodward Hghs. Blvd. Detroit 20 ..... KT4-6260
Mo Reichhold Chemicals, Inc. ..... 7700 Cecondale Ave. St. Louis 3 ..... FA6-2020
NJ Reichhold Chemicals, Inc. ..... 750 Rockefeller St. Elizabeth 2 ..... EL3-0800
NY Reichhold Chemicals, Inc. ..... 724 Hanover St. Syracuse GR1-4243
Tex Reichhold Chemicals, Inc. ..... Box 6008, Houston 16 ..... OL3-0481

REILLY TAR & CHEMICAL CORP. 1615 Merchants Bank Bldg. Indpls 4, Ind MA5-7521

RELIANCE ELECTRIC & ENGINEERING CO.
24701 Euclid Ave. Cleveland 17, Ohio RE2-7100
Cal Reliance Electric & Eng. Co. ..... 5007 Venice Ave. Los Angeles BA5-0454
Conn Reliance Electric & Eng. Co. ..... 1110 Chiswell Ave. New Haven 14 ..... ST9-0877
Ill Reliance Electric & Eng. Co. ..... 5000 N Kent Ave. Chicago AV2-0440

La F. H. Johnson Co. ..... 603 Howard Ave, New Orleans 13 524-1712
Mich Reliance Electric & Eng. Co. ..... 2704 W 12 Mile Rd, Berkley LD-5900
NY Reliance Electric & Eng. Co. ..... 155 E 44th St, New York OX7-1373
Ohio Reliance Electric & Eng. Co. ..... 909 Irving Ave, Dayton 9 ..... AX8-7266
Ohio Reliance Electric & Eng. Co. ..... 1008? Cedar Rd, Cleveland FA1-7800
Pa Reliance Electric & Eng. Co. ..... 330 Gale Ave, Dale-Cynwyd TW8-5400
Pa Reliance Electric & Eng. Co. ..... 500 Mt. Lebanon Blvd, Pittsburgh 34 ..... LO8-8810
Tex Reliance Electric & Eng. Co. ..... 1317 Chestnut St, Dallas 7 ..... RI8-6971
Va Reliance Electric & Eng. Co. ..... 6040 Peacock Ave, Richmond 20 ..... AT0-5800

RELIANCE INCORPORATED .. 1770-1772 Adams Ave, Phil 24, Pa JE3-2270

REMINGTON AIR CONDITIONING DIV. REMINGTON CORP. ..... Wiley St, Auburn, NY AU3-7071

REON RESISTOR CORP. ..... 115 Lee Mill River Rd, Yonkers, NY YO5-9810
Cal F. A. Bennet Co. ..... 1010 Palisade Ave, S Pasadena MU7-9721
Cal S. E. Geller Co. ..... Box 848, San Carlos LY1-9750
Fla Winfield Electronic Sales ..... 666 NE 150th St, N Miami PL1-6665
Ill Mill-an Electronic Sales ..... 2000 W North Ave, Chicago 47 ..... CA7-6222
Ind F. E. Moss ..... 720 W Parkad Ave, Ft. Wayne EM2271
Mass Rein Reener Corp. ..... 600 Main St, Waltham 54 ..... TW4-2500
Mich R. T. Jackson Co. ..... 16004 Laffler Ave, Huntington Woods LD-5900
Mo Thunderbird Sup, Sales & Serv. ..... 1005 Main St, Kansas City WE2-6770
NY S. J. Sales Engineering Co. ..... 150 Lafayette St, New York 13 ..... WO5-7700
Pa Rem Reener Corp. ..... 1110 Western Spring Pond Bldg, Phila 7 ..... PE5-4800
Utah Applied Engineering Products Co. ..... 455 Pub Bldg, Salt Lake City EM4-4042

REPUBLIC FLOW METER CO. ..... 2000 Diversey Pkwy, Chicago 47, Ill. BR3-6800
Ga Republic Flow Meter Co. ..... 1406 Monticello Dr, NW, Atlanta 1 ..... TR8-3001
La Republic Flow Meter Co. ..... 5204 Canal Blvd, New Orleans 19 ..... RO5-3301
Mass Republic Flow Meter Co. ..... 801 Devonshire St, Boston 10 ..... HA5-0750
Mich Republic Flow Meter Co. ..... 18800 Grand River Ave, Detroit 35 ..... BR5-8660
Mo Republic Flow Meter Co. ..... 4040 Main St, Kansas City 11 ..... JE1-4310
NY Republic Flow Meter Co. ..... 96-40 Jackson Ave, Long Island City 1 ..... ST8-8110
Ohio Republic Flow Meter Co. ..... 5107 Linwood Ave, Cincinnati 8 ..... EA1-8017
Ohio Republic Flow Meter Co. ..... 1300 Euclid Ave, Cleveland 15 ..... MA1-1707
Pa Republic Flow Meter Co. ..... 308 Suburban Sq Bldg, Ardmore MI5-8800
Pa Republic Flow Meter Co. ..... 400 N Lexington, Pittsburgh 8 ..... CE2-5800
Tex Republic Flow Meter Co. ..... 1302 Delano St, Houston 20 ..... CA8-3841

REPUBLIC STEEL CORP. ..... 1441 Republic Bldg, Cleveland 1, Ohio ..... PR 1-1400
Ala Republic Steel Corp. ..... 84 Office Park, Birmingham 10 ..... TR8-0471
Cal Republic Steel Corp. ..... 603 Mobil Bldg, Los Angeles 17 ..... MA4-5146
Colo Republic Steel Corp. ..... 200 The Denver Club Bldg, Denver 2 ..... MA2-0559
Ill Republic Steel Corp. ..... 1200 McCormick Bldg, Chicago 4 ..... WA2-2270
Mo Republic Steel Corp. ..... 811 Shell Bldg, St. Louis 3 ..... CE1-8305
NY Republic Steel Corp. ..... Chrysler Bldg, New York 17 ..... OX7-6000
NY Republic Steel Corp. ..... 1400 Rand Bldg, Buffalo 3 ..... TU8-5700
Pa Republic Steel Corp. ..... 609 Suburban Sta. Bldg, Philadelphia 3 ..... LO5-6000
Pa Republic Steel Corp. ..... 1200 H. W. Oliver Bldg, Pittsburgh 22 ..... GR1-0651
Tex Republic Steel Corp. ..... Houston Club Bldg, Houston 2 ..... CA9-9151

RESE ENGINEERING INC. ..... A & Cowtland, Philadelphia 20, Pa GL5-8020
Cal T. L. Reiner ..... 8054 W Pico Blvd, Los Angeles 19 ..... WE6-0970
Cal Rese Engineering Inc. ..... 17000 S Western, Gardena FA1-6800
DC Reilingerman Associates Ltd. ..... 8119 Wisconsin Ave, Washington OL4-8001
Mass Reilingerman Associates Ltd. ..... 847 Main St, Waltham TW4-1806
Minn Engineering Products Assoc. ..... 1401 University Ave, St. Paul 4 ..... MI6-5443
Mo H. S. Brown Assoc. ..... 5225 Olive St, St. Louis ..... [illegible]
NY Reilingerman Associates Ltd. ..... 650 Pelham Ave, S. Mt. Vernon MO4-7020
NC J. L. Vogherich ..... 9700 Monroe Rd, Charlotte 5 ..... PR7-2540

RESEARCH DEVELOPMENT MANUFACTURE, INC. ..... 429 E Collins St, Philadelphia 40, Pa GL5-5700

RESEARCH EQUIPMENT CO. ..... 502 Sunnyside, Wheaton, Ill WH6-2771

RESEARCH, INC. ..... Box 6144, Edina Sta Maple, Minn WE5-2756
Cal Reagan & Co. ..... 119 S Hawthorne Blvd, Hawthorne OS6-5600
Colo Parish Electronics ..... 5300 S Albion, Denver 37 ..... HU4-0435
Ga St. Clair Associates ..... 1020 Maple Dr. NE, Atlanta 6 ..... TR1-1804
Ill Mauer Co., Inc. ..... 5000 Harlem St, Evanston GR6-0800
Mass J. M. Dexter Co. ..... 1300 Beacon St, Newton Highlands 61 ..... BA4-1130
NY Tek-Sal, Inc. ..... 64 Grand St, Passaic HU9-7200
Ohio Parish Electronics ..... 1407 San Marco, NE, Albuquerque 266-8701
Ohio R.D.P. Associates ..... 5600 Huberville Dayton 27 ..... CL3-0610
Tex R.D.P. Associates ..... 6016 Lyon Ln, Dallas 24 ..... CH7-7205
Utah Parish Electronics ..... 12 E Canadian, Salt Lake City EM7-7207
Va Edwin J. Sauer ..... Box 488, Vienna JU1-0468
Wash Martin Peggs ..... Box 507, Bellevue GL4-5840

RESEARCH SPECIALTIES CO. ..... 200 S Second Blvd, Richmond, Cal YE8-7710
Ill Research Specialties Co. ..... 6000 Park Ln, Des Plaines VA4-4800
Ind Research Specialties Co. ..... 4401 Kennedy Hwy, Bellevue 14 ..... GA4-2040
Minn Research Specialties Co. ..... 45 Glenwood Ave, Waterfield CH6-2000
NJ Research Specialties Co. ..... 10 W Pine Dr, Park Ridge PA6-0180
Pa Research Specialties Co. ..... Box 6180, Bustleton Sta, Philadelphia DE3-4000
Tex Research Specialties Co. ..... 6421 Woodall St, Bellaire MA8-5140

RESISTOFLEX CORP. ..... Woodland Rd, Roseland, NJ CA6-7700
Cal Resistoflex Corp. ..... 501 N Garemay Way, Anaheim PO8-4770
Fla Resistoflex Corp. ..... Box 5205, Miami TU8-5705
Ga Resistoflex Corp. ..... 1800 Peachtree Rd, NE, Atlanta CP1-0550
Ill Resistoflex Corp. ..... 60 E Jackson Blvd, Chicago HA7-0040
Mo Resistoflex Corp. ..... 9720 Manor Rd, Kansas City HE5-0040
Ohio Resistoflex Corp. ..... 20100 Center Ridge Rd, Cleveland BR1-1170
Ohio Resistoflex Corp. ..... 53 Park Ave, Dayton AX3-1700
Pa Resistoflex Corp. ..... 200 Lancaster Ave, Bryn Mawr LA5-6120
Tex Resistoflex Corp. ..... 120 Glen St, Dallas EM5-5400
Tex Resistoflex Corp. ..... 724 Friar Tuck, Houston JA9-1208
Wash Resistoflex Corp. ..... 1402 6th Ave. S, Seattle MA4-6221

RESISTOR-STOKES ELECTRONIC COMPONENTS, INC. 2540 Hamilton Ave, Cleveland 14, Ohio TO1-3230
Cal C. W. Fowler Co. ..... 1014 Fair Oaks Ave, South Pasadena MU5-3941
For Terminal Radio Intl. Ltd. ..... 260 W 17th St, New York 11, NY CH5-6300

REVERE COPPER & BRASS, INC. 230 Park Ave, New York 17, NY YU6-5300
Cal Revere Copper & Brass, Inc. ..... Box 3546, Terminal Annex, Los Angeles 54
Fla Revere Copper & Brass, Inc. ..... 8750 NW 32nd Ct, Miami 42
Ill Revere Copper & Brass, Inc. ..... 5200 N Natchez Ave, Chicago 56
Md Revere Copper & Brass, Inc. ..... 1201 Wisconsin St, Baltimore 5
Mass Revere Copper & Brass, Inc. ..... 54 N Front St, New Bedford
Mich Revere Copper & Brass, Inc. ..... 5051 W Jefferson Ave, Detroit 9
Mo Revere Copper & Brass, Inc. ..... 3015 Olive St, St. Louis 8
NY Revere Copper & Brass, Inc. ..... Box 183, Rome
NY Revere Copper & Brass, Inc. ..... 500 Lexington Ave, New York 17
Pa Revere Copper & Brass, Inc. ..... 600 Washington Rd, Pittsburgh 28
Tex Revere Copper & Brass, Inc. ..... 6000 Chancellor Row, Dallas 35
Wash Revere Copper & Brass, Inc. ..... 316 Fairview Ave, N, Seattle 9

REYNOLDS METALS CO. ..... Box 2346, Richmond 16, Va AT3-2311
Cal Reynolds Metals Co. ..... 5044 Wilshire Blvd, Los Angeles 5 ..... DU1-5511
Co Reynolds Metals Co. ..... 1949 Monroe Dr, NE, Atlanta 9 876-8721
Ill Reynolds Metals Co. ..... Wrigley Bldg, Chicago 17 ..... WE6-5300
Mass Reynolds Metals Co. ..... Lyman Park, Chestnut Hill 67 ..... WA4-5770
Mich Reynolds Metals Co. ..... Box 5000, Seven Oak Sta, Detroit 30 ..... KE7-5000
Mo Reynolds Metals Co. ..... 6255 S Mesmer, St. Louis 8 ..... PA6-5700
NJ Reynolds Metals Co. ..... 618 Market St, Camden 1 ..... WO4-5006
NY Reynolds Metals Co. ..... 19 E 47th St, New York 17 ..... EL5-7700
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Mass Riley Stoker Corp. ..... 60 Federal St, Boston LB-1000
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Pa Riley Stoker Corp. ..... 12 S 15th St, Phila MA7-0800
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Tex Wallace Associates ..... Box 12029 Dallas 30 ..... FL5-7600
Utah F. V. Gates Co. ..... 200 S Main St. Salt Lake City 1 ..... EL0-1101
Wash Cornpowell ..... 60 Hanford St. Seattle 4 ..... MA4-6120
Can R. H. McGregor ..... Box 165, Sta. H, Toronto 13, Ont OX0-6631

SMITH TUBE CORP ..... 75 N Maple Ave. Ridgewood, NJ GA4-4632

SNYDER MFG. CO., INC. ..... Box 466, New Philadelphia, Ohio 3-2510
Cal Nuclear Engineering Co. Inc. ..... 65 Bay St. Pleasanton
NJ Nuclear Engineering Co. Inc. ..... 400 Delancy St. Newark

SOC. DES BENNES FLAMBES 21 rue Jean Goujon, Paris 8, Fr BAL23-04

SOCIETE FIVES-PENHOET ... 240 rue Saint-Denis, Paris 1, Fr BOC87-39

SOCIETE MONTEVELLE DE COMMERCIALE NUCLEAIRE
69 rue de Monceau Paris 8, Fr ..... LAB. 45-49

SOCIETE RATEAU ..... Rue Rateau La Courneuve, Seine, Fr ..... PLA. 18-80

SOUDEN S.A. ..... 10 rue de la Procession Suresnes, Seine, Fr LONG 5 - 01
Cal W. J. Purdy Co. ..... 323 7th St. San Francisco 3 ..... UN8-3200
Cal Shepherd Winton Co. ..... 8100 Colorado Blvd. W Hollywood 28 ..... HO6-2171
Ga J. Millar Assoc. ..... 1036 Peachtree St. NW, Atlanta 9 ..... EL4019
Ill Amperex ..... 7660 W North Ave. Elmwood Park GL3-3484
NY Amperex Electronic Corp. ..... 230 Duffy Ave. Hicksville WE1-6200
Ore R. Legg Co. ..... 1035 NW 21st Ave. Portland 9 ..... CA5-97 20
Aust Philips Electrical Industries Pty Ltd. 69-79 Clarence St. Sydney EX1021
Can Philips Electronics Industries Ltd. 116 Vanderhoof Ave. Toronto 17, Ont.
Eng Research & Control Instruments Ltd. 207 Kings Cross Rd. London W.C.1. ..... TE3077
Ger Elektron Spezial G.m.b.H. ..... (24 a) Hamburg 1. Moorkenbaumsen 9 ..... HA8 16 17
Jap Matsushita Electric Trading Co. Ltd. 7, 6 Chome Hisha Tamura Cho TO (481)
Matsushita-Tokyo-Fiem Tokyo-Central 504 ext.4842
Neth Philips Electronische Industrie 6-78 8071 ..... 1724 26 28

SOLARTRON ELECTRONIC GROUP LTD.
Victoria Rd. Farnborough, Hants. Eng FA2000
Cal Solartron Inc. ..... 1948 S Zapo St. Anaheim PRO-0053
Fr Solartron France S.A. ..... 10 bis Rue de Terre Neuve, Paris 16
Ger Solartron Elektronik GmbH ..... Bayerstr 13, Munich 15 ..... MU88.51.00
Holl Solartron(Nederland) N.V. ..... Zeeland 35, Scheveningen, The Hague HA4431147
Ind Solartron Electronic Group Ltd. ..... 70 Janpath, New Delhi 1 ..... HO42070
Ital Solartron S. L. ..... Via Ipp, Nievo 32, Milan MO413 100
Swed A.B. Solartron ..... Hedingsgatan 9, Stockholm HO. 07000000

SOLID STATE RADIATIONS, INC.
7261 S Casseline Ave. LA 56, Cal ..... [illegible]
Cal C. Hermann Associates ..... Box 1175, Palo Alto ..... DA6-[illegible]
Cal C. Hermann Associates ..... 651 E Walnut St, Pasadena ..... MU1-[illegible]
Cal C. Hermann Associates ..... 4707 Spring St, La Mesa ..... HO6-[illegible]
Colo C. Hermann Associates ..... Box 1175, Palo Alto ..... HO5-[illegible]
NY Scientific Systems Sales Corp. .. Box 3, Bayside ..... BA5-[illegible]
Tex C. Hermann Associates ..... 3660 Ash Creek Dr, Dallas 22 ..... DA7-[illegible]
Va Hildebrand Co. ..... Box 1001, Fairfax ..... CH9-[illegible]
Wash C. Hermann Associates ..... 401 S 48th Ave. SE, Seattle ..... LK3-[illegible]
Jap Marubeni-Iida Co. Ltd. ..... 4 1-Chome, Ginzamachi, Chiyoda-Ku, Tokyo ..... [illegible]

SOLVS-SCHALL LTD. ..... Rosegate Lo. Stanmore Middx. Eng. ..... [illegible]

SORENSEN-BRY KATTENBURG Hubbards Ave. South Norwalk, Conn ..... [illegible]
Sales Representatives in all principal cities.

SOUTHEASTERN ATOMIC LABS. INC.
4225 Bay to Bay Blvd. Tampa 9, Fla ..... [illegible]

SOUTHERN INSTRUMENTS, LTD. Frinder Rd. Carnbroke, Surrey, Eng

SOUTHWESTERN ENGINEERING CO. 4800 Santa Fe Ave. Los Angeles 58, Cal ..... [illegible]

SPARTA MFG. CO. DIV. O.S. CERAMIC TILE CO. Dover, Ohio ..... [illegible]
Cal R. S. Porter Co. ..... 1894 Chiquita Pl. Glendale 8 ..... CH9-[illegible]
Ill Lem Sales Co. ..... 6077 Northwest Hwy. Chicago ..... WA9-[illegible]
Ind S. G. Higbee ..... 631 E 8th St. Goshen ..... KE3-[illegible]
Mich McCormey Sales Engineering ..... 18221 E Maple Rd. Birmingham ..... DO6-[illegible]
Mo Nagel & Nax ..... 11001 Manchester Rd. St. Louis ..... YO6-[illegible]
NJ Hooper-Bryce Co. ..... 404 Bloomfield Ave. Montclair ..... PI6-[illegible]
NY H. W. Harding ..... 109 Hunting Valley Rd. Clarence ..... BE1-[illegible]
Ohio P. Teller Associates ..... 1033 North Rd. Cincinnati ..... WI1-[illegible]
Pa C. H. Gardner Co. ..... 3701 N Broad St, Philadelphia ..... BA5-[illegible]
Pa Industrial Specialties Co. ..... 209 Mt. Lebanon Blvd. Pittsburgh ..... PI1-[illegible]
Tenn J. H. McCall Co. ..... 5004 St. Elmo Ave. Chattanooga ..... AM7-[illegible]
Va C. P. Hines ..... Box 114, Charlottesville ..... [illegible]

SPECIAL INSTRUMENTS LAB. INC.
302 W Vine Ave. Knoxville 32, Tenn ..... [illegible]
NY Transmarco Corp. ..... 18 William St. New York
NY Mondial Export Corp. ..... 70 E 45th St. New York 17

SPECIALTY ELECTRONICS DEVELOPMENT CORP.
73-01 39th Ave. Flushing, NY ..... [illegible]
DC George J. Gill ..... 1717 Penna. Ave. NW, Washington ..... [illegible]
Can Ahearn & Soper Co. Ltd. ..... 260 Caledonia Rd. Toronto 19 ..... [illegible]
Pr Maurelli & Construmex ..... 18 Rue De La Fraternidade, Paris

SPECTRAL ELECTRONICS CORP. 1701 S Del Mar Ave. San Gabriel, Cal ..... [illegible]
Cal Cerucci & Associates ..... 136 Cypress St. Redwood City ..... [illegible]
Colo Beach, Fenger & Assoc. ..... 2041 S Broadway, Denver ..... [illegible]
Fla J. Gardner Co. ..... 236 Lincoln Rd. Miami Beach ..... [illegible]
Ill Knoblock & Malone, Inc. ..... 1000 N Newland Ave. Chicago 36 ..... [illegible]
Mass Kirchen & Kirchin, Inc. ..... 700 Massachusetts Ave. Lexington ..... [illegible]
Minn F. B. Hill Co. ..... 6310 Excelsior Blvd. Minneapolis ..... [illegible]
NM Beach Fenger & Associates ..... 6510 Domingo Rd. NE, Albuquerque ..... [illegible]
NY D. S. Hinan Co. ..... 104 S Central Ave. Valley Stream ..... [illegible]
Pa S. E. MacDonald, Inc. ..... 1501 Spruce St. Philadelphia 2 ..... [illegible]
Tex Ammon & Champion Co. ..... 2714 Bonner St. Dallas 4 ..... [illegible]
Wash Marrowin, Inc. ..... 1017 Norman St. Seattle 44 ..... [illegible]
Can Wilcomire Electronics, Ltd. ..... 1701 Wilcomire Ave. Ottawa 2, Ontario ..... [illegible]

SPECTROMAGNETIC IND. ..... Box 2386 Hayward, Cal ..... [illegible]

SPEEDFLOW FITTINGS DIV.
HORACE T. POTTS CO. ..... Erie Ave. & D St. Philadelphia 24, Pa ..... [illegible]
Md H. T. Potts Co. ..... 7020 Commercial Ave. Baltimore 4 ..... [illegible]

SPEER CARBON CO. ..... Thomas St. St. Marys, Pa ..... [illegible]
Cal E. A. Wilson Co. ..... Los Angeles ..... [illegible]

SPEER RESISTOR DIV.
SPEER CARBON CO. ..... Bradford, Pa ..... [illegible]
Cal J. W. Marsh Co. ..... 6216-20 W Jefferson Blvd. Los Angeles 16 ..... [illegible]
Cal W. E. Hanmer Co. ..... Box 1205, Beverly Hills ..... [illegible]
Conn A. I. Kohr, Jr. ..... Spring Valley Rd. Woodbridge ..... [illegible]
Fla Components Sales Corp. ..... 1000 NE 16th, North Miami Beach 62 ..... [illegible]
Ill W. A. Harizons ..... 6075 N Lincoln Ave. Chicago 45 ..... [illegible]
Mich Associates, James N Co. ..... 2842 W Grand Blvd. Detroit 2 ..... [illegible]
NY W. M. Hide ..... 4 Spruce St. Smithtown ..... [illegible]
NY E. W. Jackson ..... 4445 Main St. Buffalo 26 ..... [illegible]
Ohio J. P. Kilfoil ..... 9416 Montgomery Rd. Cincinnati 43 ..... [illegible]
Pa R. H. Hildebrand ..... Fairview Village, Montgomery County ..... [illegible]
Tex J. E. Gaseler ..... 4039 N Central Expwy. Dallas 1 ..... [illegible]
Wash F. H. Haigh Co. ..... 2012 Eastlake Ave. Seattle 2 ..... [illegible]

SPELLMAN HIGH VOLTAGE CO., INC.
1930 Adee Ave. Bronx 69, NY ..... [illegible]

SPENCER CHEMICAL CO. ..... 500 Dwight Bldg. Kansas City 5, Mo. ..... [illegible]

SPENCER-KENNEDY LABS., INC. 1320 Soldiers Field Rd. Boston 35, Mass ..... [illegible]
Cal K'Inness Co. ..... 416 N Larchmont Ave. Los Angeles 36 ..... [illegible]
Colo Scientific Instrument Co. ..... 1409 Pennsylvania St. Denver 3 ..... [illegible]
Conn G. Gregory Associates ..... 0 5 Main St. Cheshire ..... [illegible]
Ill L. F. Grant & Assoc. ..... 5218 W Diversey Ave. Chicago 39 ..... [illegible]
Mass G. Gregory Associates ..... 7 Tide Dr. Natick ..... [illegible]
Minn Engineering Prod. Assoc. ..... 2119 Grand Ave. St. Paul 5 ..... [illegible]
NJ L. A. Garten & Associates ..... 275 Passaic Ave. Caldwell ..... [illegible]
NY SBM Associates, Inc. ..... 177 Winton Rd. Rochester 10 ..... [illegible]
NY SBM Associates, Inc. ..... 220 Somerville Dr. Utica ..... [illegible]
NY SBM Associates, Inc. ..... Newlan Rd. RD3, Binghamton

Ore Hawthorne Electronics ..... 700 SE Hawthorne Blvd. Portland 14 ..... [illegible]
Pa L. A. Garten & Associates ..... 720 Washington Ln. Jenkintown ..... [illegible]

SPERRY ELECTRONIC TUBE DIV.
SPERRY RAND CORP. ..... Gainesville, Fla ..... [illegible]
Fr Sperry Europe Continental ..... 7, Ave. de l'Opera, Paris 1er ..... [illegible]

SPERRY GYROSCOPE DIV. SPERRY RAND CORP.
Great Neck, NY ..... [illegible]
Cal Sperry Gyroscope Div. ..... 715 Folsom St. San Francisco 7 ..... [illegible]
Cal Sperry Gyroscope Div. ..... 2000 E Imperial Highway, El Segundo ..... [illegible]
Kan Sperry Gyroscope Div. ..... 1380 Industrial Ave. Wichita ..... [illegible]
La Sperry Gyroscope Div. ..... 400 Gentemple St. New Orleans 6 ..... [illegible]
NY Sperry Gyroscope Div. ..... 139 Clinton St. Brooklyn ..... [illegible]
Ohio Sperry Gyroscope Div. ..... 5007 W 150th St. Cleveland 11 ..... [illegible]
Wash Sperry Gyroscope Div. ..... 500 W Harrison St. Seattle 99 ..... [illegible]

SPERRY MICROWAVE ELECTRONICS CO. Box 1828 Clearwater, Fla
Cal J. T. Hill Co. ..... 400 S Pine St. San Gabriel ..... [illegible]
Cal Sperry Gyroscope Co. ..... 2000 E Imperial, El Segundo ..... [illegible]
Fla S. R. Lee Associates, Inc. ..... Box 7006, Orlando ..... [illegible]
Mass Technical Instruments, Inc. ..... 60 Main St. Reading ..... [illegible]
NJ L. A. Garten & Associates ..... 275 Passaic Ave. Caldwell ..... [illegible]
NY M. P. Andrews Co. ..... 819 Mott Rd. Fayetteville ..... [illegible]
NY Sperry Gyroscope ..... Great Neck ..... [illegible]
Ohio Sperry Gyroscope Co. ..... Tolbert Tower, Dayton 9 ..... [illegible]
Pa L. A. Garten ..... 720 Washington Ln. Jenkintown ..... [illegible]
Tex J. A. Green Co. ..... 7110 Haney Ct. Dallas 35 ..... [illegible]
Wash M. R. Schelin Co. ..... 4807 Aitken Way, Seattle ..... [illegible]

SPERRY PHOENIX DIV. SPERRY RAND CORP. 2111 W Buckeye Rd. Phoenix, Ariz ..... [illegible]
Cal W. W. Dawes ..... Box 6973, San Diego 6 ..... [illegible]
Cal Sperry Phoenix Co. ..... 2000 E Imperial Hwy. El Segundo ..... [illegible]
DC Sperry Phoenix Co. ..... 1000 16th St. NW, Washington 6 ..... [illegible]
Ga F. S. Miller ..... 6335 Williamson Dr. NE, Atlanta 5 ..... [illegible]
Kan Sperry Phoenix Co. ..... 1380 Industrial Ave. Wichita 12 ..... [illegible]
Ohio Sperry Phoenix Co. ..... 110 W 1st St. Dayton 2 ..... [illegible]
Wash Sperry Phoenix Co. ..... 500 W Harrison, Seattle 9 ..... [illegible]

SPERRY PRODUCTS CO. ..... Shelton Road Rd. Danbury, Conn. ..... [illegible]
Cal Sperry Products Co. ..... 681 N Lake St. Burbank ..... [illegible]
Ga Sperry Products Co. ..... 5400 Abby Ln. NE, Atlanta ..... [illegible]
Ill Sperry Products Co. ..... 20 E Jackson Blvd. Chicago 4 ..... [illegible]
Kan Sperry Products Co. ..... 1745 E Mainz St. Wichita 16 ..... [illegible]
Mo Sperry Products Co. ..... 818 Olive St. St. Louis ..... [illegible]
Pa Sperry Products Co. ..... 7600 Penn Ave. Pittsburgh 8 ..... [illegible]
Tex Sperry Products Co. ..... 10834 N Fwy Oak Rd. Houston 24 ..... [illegible]
Va Sperry Products Co. ..... 8002 W Broad St. Richmond ..... [illegible]

SPERRY SEMICONDUCTOR DIV.
SPERRY RAND ..... 288 Main Ave. Norwalk, Conn ..... [illegible]
Cal Sperry Semiconductor Div. ..... 2000 E Imperial Hwy. El Segundo ..... [illegible]
Cal Pacific Wholesale Co. ..... 1050 Mission St. San Francisco ..... [illegible]
Cal Radio Products Sales, Inc. ..... 1355 S Hill St. Los Angeles 15 ..... [illegible]
Fla Power Associates ..... Box 6807 Orlando ..... [illegible]
Ill Sperry Semiconductor Div. ..... 5835 W Potomac Ave. Chicago 44 ..... [illegible]
Mass Sperry Semiconductor Div. ..... 44 Rearwood Ave. Needham ..... [illegible]
Mass Sperry Semiconductor ..... 55 Franklin St. Malden ..... [illegible]
Md Sperry Semiconductor Div. ..... Gardner Rd. Hyattsville, Baltimore ..... [illegible]
NJ Sperry Semiconductor Div. ..... 10 Summit Ave. Westwood ..... [illegible]
NY Martin P. Andrews, Inc. ..... 819 Mott Rd. Fayetteville ..... [illegible]
NY Avnet Electronics Corp. ..... 70 State St. Westbury ..... [illegible]
NY Sperry Semiconductor Div. ..... 75-35 111th St. Forest Hills ..... [illegible]

SPINNER ELECTRO-PHYS. GERATE GmbH., GERM
Engelsmannstr 22, Munich 2, W Ger ..... [illegible]

SPLIT BALLBEARING DIV. APS INC.
Lebanon, Ill ..... [illegible]
Cal Split Ballbearing, Div. APS, Inc. 1301 Marshall St. Redwood City ..... [illegible]
Colo Bearing Service & Supply Co. .. 4400 Claude Ct. Denver ..... [illegible]
Ill Split Ballbearing, Div. APS, Inc. 1817 Pine St. Des Plaines ..... [illegible]
Iowa Split Ballbearing, Div. APS, Inc. 617 1st Ave. SE, Cedar Rapids ..... [illegible]
Mich Split Ballbearing, Div. APS, Inc. 21001 Mack Ave. Grosse Pointe Woods 36 ..... [illegible]
Minn Split Ballbearing, Div. APS, Inc. 14420 Bond Ave. S, Minneapolis 24 ..... [illegible]
NJ Split Ballbearing, Div. APS, Inc. 89 Morley Ln. Lawrence ..... [illegible]
NY Split Ballbearing, Div. APS, Inc. 494 S Chelsea Rd. White Plains ..... [illegible]
Ohio Split Ballbearing, Div. APS, Inc. 4207 Twin Circle Dr. North Olmsted ..... [illegible]
Tex Bearco Engineering Co. ..... 5800 W Mockingbird Ln. Dallas ..... [illegible]
Can Lyman Tube & Supply, Ltd. ..... 5400 Pare St. Montreal, Quebec ..... [illegible]

SPRAGUE ELECTRIC CO. ..... Marshall St. North Adams, Mass ..... [illegible]
Cal W. J. Purdy of California ..... 312 7th St. San Francisco 3 ..... [illegible]
Cal Sprague Electric Co. ..... 12970 Panama St. Los Angeles 66 ..... [illegible]
DC Sprague Electric Co. ..... 704 6th St. NW, Washington 1 ..... [illegible]
Ill Sprague Electric Co. ..... 6042 W Montrose Ave. Chicago 34 ..... [illegible]
Mass Sprague Electric Co. ..... 310 Washington St. Newton 58 ..... [illegible]
Mo Sprague Electric Co. ..... 1010 Lindell Blvd. St. Louis 3 ..... [illegible]
NJ Sprague Electric Co. ..... 140 Cooper St. Camden ..... [illegible]
NM R. C. Brown Co. Inc. ..... 2018A San Mateo Blvd. NE, Albuquerque ..... [illegible]
NY Sprague Electric Co. ..... 30 E 42nd St. New York 17 ..... [illegible]
Ohio Sprague Electric Co. ..... 504 Leo St. Dayton ..... [illegible]
Tex Sprague Electric Co. ..... 2000 Lemmon Ave. Dallas 19 ..... [illegible]

SQUIBB & SONS, E. R. ..... 745 Fifth Ave. New York 22, NY ..... [illegible]
Cal E. R. Squibb & Sons ..... 5806 Lankford Ave. Los Angeles 22 ..... [illegible]
Cal E. R. Squibb & Sons ..... 684 4th St. San Francisco 7 ..... [illegible]
Ga E. R. Squibb & Sons ..... 150 Southwood Dr. NE, Atlanta 9 ..... [illegible]
Ill E. R. Squibb & Sons ..... 5946 Bear Ave. Franklin Park ..... [illegible]
Mass E. R. Squibb & Sons ..... 91 Cambridge Pkwy. Cambridge 42 ..... [illegible]
Mo E. R. Squibb & Sons ..... 4400 Squibb Rd. Kansas City 32 ..... [illegible]
NJ E. R. Squibb & Sons ..... Georges Rd. New Brunswick ..... [illegible]
NY E. R. Squibb & Sons ..... 47-40 32nd St. Long Island City 1 ..... [illegible]
Ohio E. R. Squibb & Sons ..... 10805 Cedar Rd. Cleveland 6 ..... [illegible]

Pa E. R. Squibb & Sons ..... Squibb Rd. King of Prussia ..... [illegible]
Tex E. R. Squibb & Sons ..... 5501 Buffalo Speedway, Houston 5 ..... [illegible]
Wash E. R. Squibb & Sons ..... 3400 108th Ave. SE, Bellevue ..... [illegible]

SQUIRES CO., C. E. ..... 10402 Superior Ave. Cleveland 10, Ohio ..... [illegible]
Ariz Central Station Equip. Co. ..... 2222 Aviation Hwy. Tucson ..... [illegible]
Cal The Kalem Co. ..... 4015 Hollis St. Emeryville 8 ..... [illegible]
Colo Ambler Co. ..... 401 W Bayaud, Denver ..... [illegible]
Ill D. H. Howe & Co. ..... 1 N LaSalle St. Chicago 2 ..... [illegible]
Ind D. D. Merchant Co. Inc. ..... 6000 Keystone Ct. Bldg. Indianapolis ..... [illegible]
Mass Evans Supply Co. ..... P. O. Box 40, Winchester ..... [illegible]
Md C. H. Schlenk Co. ..... Washington Blvd Dr. Glyndon ..... [illegible]
Mo Smith Lewis Specialty Co. Inc. ..... 2202 Oak St. Kansas City ..... [illegible]
NY D. S. Whipple ..... 4 Morris Ave. Schenectady ..... [illegible]
NY A. M. Seymour Associates ..... Box 3005, Rochester ..... [illegible]
NY J. F. Kern & Co. Inc. ..... 420 7th Ave. New York 1 ..... [illegible]
NC Kimmel Engineering ..... P. O. Box 2722, Greensboro ..... [illegible]

STACKPOLE CARBON CO. ..... St. Marys, Pa ..... [illegible]
Cal S. L. Sprague ..... 16942 Vermont Blvd. Gardena ..... [illegible]
Conn E. G. Dunph ..... 336 Farmington Ave. Plainville ..... [illegible]
Ill C. O. Dunn ..... 1109 Harvard Terrace, Evanston ..... [illegible]
Mich J. E. Vollmer, Jr. ..... 6010 Plainfield, Dearborn ..... [illegible]
Minn H. M. Richardson ..... 5 E 42nd St. Minneapolis ..... [illegible]
Mo M. H. Butler ..... 1405 Arnold Dr. Webster Groves ..... [illegible]
NJ J. H. Lee's ..... 128 Westfield Ave. Westfield ..... [illegible]
NY R. G. Wagner ..... 1 McKee Rd. Rochester ..... [illegible]
Ohio E. V. Analey ..... 5005 Rathmoy Rd. Dayton 39 ..... [illegible]
Ohio J. F. Clark ..... 5000 Tall Oaks, Toledo ..... [illegible]
Pa J. P. Clancy ..... 1005 Broad Ave. Drexel Hill ..... [illegible]
Pa C. A. Hessner ..... 604 Mission St. St. Marys ..... [illegible]

STALKER CORP. ..... 950 Woodside Ave. Evanston, Utah ..... [illegible]
Ariz McDonald Industrial Sales, Inc. ..... 3202 N General Ave. Phoenix
Conn Industrial Sales Engineers ..... P. O. Box 77, Old Saybrook
Mich Jay Engineering Co. ..... 1200 Devine, Wyandotte

STAMFORD FAN CO. INC. ..... 4 South St. Stamford, Conn ..... [illegible]

STANAT MFG. CO., INC. ..... 311 Sussex St. Westbury, NY ..... [illegible]
Cal Meyer Sheet Metal Works Co. ..... 1900-20 Santa Fe Ave. Los Angeles ..... [illegible]
Cal P. W. Swanson Co. ..... 800 S Raymond Pkwy. San Mateo ..... [illegible]
Conn L. Clare & Co. ..... Box 1416, Hartford ..... [illegible]
Ind T. A. Bell ..... 504 E 6th St. Indianapolis 39 ..... [illegible]
Mass L. Clare & Co. ..... Box 1416, Hartford, Conn ..... [illegible]
Ohio W. E. Sandoe ..... 3005 Coventry Rd. Shaker Heights ..... [illegible]
Pa H. G. Sandoe ..... 3005 Coventry Rd. Shaker Heights, Ohio ..... [illegible]
R I L. Clare & Co. ..... Box 1416, Hartford, Conn ..... [illegible]
Wis Pagel Machinery Co. ..... 2430 N 27th St. Milwaukee 10 ..... [illegible]

STANDARD PRESSED STEEL CO. Box 1021, Jenkintown, Pa

STANDARD SAFETY EQPT. CO. 421 N Quincy St. Palatine, Ill ..... [illegible]
Cal Dubian Safety Products Co. ..... 12021 W Washington Blvd. Los Angeles 66 ..... [illegible]
NJ Standard Safety Equipment Co. ..... 19 Market St. Belleville 7 ..... [illegible]
Ohio Standard Safety Equipment Co. ..... 816 E 152nd St. Cleveland 10 ..... [illegible]

STANDARD TELEPHONES & CABLES LTD.
29 Glasshouse St. London EC1, Eng
NY London Systems Inc. ..... 67 Broad St. New York 4

STANDARD-THOMSON CORP. 152 Green St. Waltham 54, Mass
Cal Standard-Thomson Corp. ..... 1720 Westwood Blvd. Los Angeles 24 ..... [illegible]

STANDARD WIRING CO. DIV. DUTTON CORP.
44-42 Jackson St. Newburgh, NY ..... [illegible]
Cal Tuned Engineering Co. ..... 4800 Cleveland St. Los Angeles 8 ..... [illegible]
Fla Specialized Equipment Corp. ..... Box 788, Cocoa Beach ..... [illegible]
Minn H.E. Ness Representative, Inc. ..... 10 Highland Ave. Somerville 45 ..... [illegible]
NY J. Lind ..... 1000 East Ave. Rochester 10 ..... [illegible]
NY Milton Sax Associates, Inc. ..... 500 Fifth Ave. New York 36 ..... [illegible]
Ohio J. P. Schwarter ..... 131 N Ludlow, Dayton 2 ..... [illegible]
Pa Charles S. Hile Co. ..... Box 144, Paoli ..... [illegible]

STANLEY ENGINEERING CO. Stanley Bldg. Muscatine, Iowa ..... [illegible]
Ill Stanley Engineering Co. ..... 208 S La Salle St. Chicago 4 ..... [illegible]
Ohio Stanley Engineering Co. ..... 800 Hanna Bldg. Cleveland 15 ..... [illegible]
Nig Stanley Eng (Nigeria) Ltd. ..... Private Mail Bag 5060, Lagos
W Af Stanley Engineering Co. of Africa Box 446, Monrovia, Liberia

STANRAY CORP. ..... 200 S Michigan Ave. Chicago 4, Ill ..... [illegible]

STAPLEX CO. AIR SAMPLER DIV. 703 5th Ave. Brooklyn 32, NY ..... [illegible]

STAR PORCELAIN CO. ..... 21 Maitland Ave. Trenton, NJ ..... [illegible]

STATE TESTING LAB. INC. ..... 227 Hamilton St. Bridgeport 8, Conn ..... [illegible]
Conn New Haven Testing Lab. Inc. ..... 350 Dixwell St. New Haven ..... [illegible]
Conn Mat-L-Test ..... 240 Cedar St. Rye ..... [illegible]

STAUFFER CHEMICAL CO. ..... 380 Madison Ave. New York 17, NY ..... [illegible]
Del Stauffer Chemical Co. ..... Delaware Trust Bldg. Wilmington ..... [illegible]
Ill Stauffer Chemical Co. ..... Prudential Plaza, Chicago 1 ..... [illegible]
Mich Stauffer Chemical Co. ..... 14601 W McNichols Rd. Detroit 35 ..... [illegible]
Ohio Stauffer Chemical Co. ..... 600 S Main St. Akron 8 ..... [illegible]
Ore Stauffer Chemical Co. ..... Cedar Rd. North Portland ..... [illegible]
Tex Stauffer Chemical Co. ..... 1400 Dallas St. Houston 15 ..... [illegible]

STEAMS-ROGER MFG. CO. ..... Box 1028, Denver 17, Colo ..... [illegible]
Tex Steams-Roger Mfg. Co. ..... 804 1st City Bank, South Bldg. Houston ..... [illegible]
Utah Steams-Roger Mfg. Co. ..... 40 Richards St. Salt Lake City ..... [illegible]
Can Steams-Roger Eng. Co., Ltd. ..... 1121 Fairmount St. Calgary, Alta. ..... [illegible]

STEEL IMPROVEMENT & FORGE CO. 970 E 64 St. Cleveland 3, Ohio UT1-8000
Cal Steel Improvement & Forge Co. 201 S Central Glendale 4 ..... CH5-1041
Colo D. W. Jones ..... 2323 Dunsoit St. Denver 4 ..... KE9-4921
Fla Southern Dynamics, Inc. ..... 1400 W Church St. Orlando GA8-2050
NY C. G. Hughes ..... 40 Meadow Rd. Rutherford, NJ WE3-3605
Pa Gulbert Industries, Inc. ..... Box 637, Morrisville DU6-5610
Wis A. S. Hammond ..... 1300 W 59th St. Milwaukee 8 ..... BU3-3900

STEPHEN & CO. LTD., R.A. ..... EB-726 Lavender Ave. Minden, Surrey, Eng 0BT 1GG
Aust Long Ind. Equip. Pty. Ltd. ..... 5054 Gouge St. Sydney, New So Wales ... 910000
Aus Siemens & Halske GmbH ..... Apostelgasse 23, Wien III/60
Belg Nachmann S.A. ..... 59 rue de Fonz aux Loups, Brussels ..... 0010 .72.10
Den Sumter & Nordhausen ..... Tagloverbaqade 38, Copenhagen ..... CEND 60 11
Ger Siemens & Halske ..... Hartmannstrasse 38, Karlsruhe W ..... KA 0061
Nor A/S Lokmodell ..... Hovfaret 15, Oslo OS0040400
Spa Tonicos Mechanos S.A. ..... Sancoc 46, Madrid, 1 ..... MA300005
Swit Siemens-Elektro A.G. ..... Lovenstr. 35, Zurich

STEREOTRONICS CORP. ..... 1717 N Highland Ave. LA 28, Cal HO0-2979
Cal E. V. Osborn & Associates ..... 5000 W Washington Blvd. Los Angeles WE0-5541

STERLING TRANSFORMER CORP.
500 Driggs Ave. Brooklyn 11, NY ST3-4200
Cal H. Gar Associates, Inc. ..... 14494 Dickens St. Sherman Oaks ST3-6041
Cal R. L. Cale Co. ..... 400 Market St. San Francisco 11 ..... SU1-7001
Conn Walworth Controls ..... 101 Main St. Derby 06417 ..... JA3-0000
Fla Winfield Electronics ..... 600 NE 125th St. N Miami PL3-6600
Ind R. T. Mathews & Co. ..... 1127 Wells St. Fort Wayne EA8017
NY Franklin & Andrews Sales Corp. ..... 2 Stamford Terrace, Syracuse 3 ..... GR5-1130
NY Willgold Electronic Sales ..... 170 N Village Ave. Rockville Centre RO6-4023
Ohio Johnson Associates ..... 6010 Montgomery Rd. Cincinnati 30 ..... LO1-8000
Pa Eastern Components, Inc. ..... 819 Chelwynne Ave. Philadelphia WA4-4000
Tex F. Cross & Co. ..... Box 7008, Dallas FL3-5007

STEVENS-ARNOLD, INC. ..... 7 Elkins St. S Boston 27, Mass AN6-7130

STEVENS MFG. CO., INC. ..... P.O. Access 1007, Mansfield, Ohio TU6-1311
Cal Assoc Electric, Inc. ..... 1400 Bayshore Blvd. San Francisco 24 ..... JU6-4076
Cal Sales Engineers, Ltd. ..... 1015 Monroe St. Paramount MU9-0060
Colo Inland Americans ..... 1480 Hoyt St. Lakewood BU9-0004
Ill E. H. Taylor ..... 6700 Stony Island Ave. Chicago 49 ..... FA4033-3
Kan D. D. Darnell & Co. ..... Johnson Dr. & Nall Ave. Mission DA3-1750
Md Rothenberger & Co., Inc. ..... 14011 Claremfield Rd. Rockville WH0-4400
Mass The Representative Corp. ..... 10 High St. Boston 10 ..... HA6-6541
NJ L. C. Sanford ..... 202 Woodland Ave. Rutherford WE2-0910
NY H. C. Johnson Agencies, Inc. ..... 111 Mt. Hope Ave. Rochester 20 ..... HA6-1000
Pa Rothenberger & Co. Inc. ..... 53 Cricket Ave. Ardmore MD-0811
Wash H. D. Campbell Co. ..... 210 9th Ave. N. Seattle 9 ..... MA6-5003
Can R. W. Ingle ..... Box 185, Renfrew, Ont. WE2-4002

STEWART MFG. CO., D. H. ..... E 26 St. Chattanooga 1, Tenn. TA5-3561
Cal Electrical Specialty Co. ..... 5000 E 12th St. Los Angeles AN8-0611
Ill Kimbrock & Malone, Inc. ..... 1000 N Rowland Ave. Chicago 35 ..... NA2-4006
Minn A. Gale ..... Box 6, Roseville MU3-1000
Mich D. Clifford ..... 633 Fisher Bldg. Detroit 2 ..... TR-3544
Mont A. A. Carnahan ..... Griggs-Midway Bldg. St. Paul 4 ..... MA4-7030
Mo A. O. Wagner & Sons ..... 4000 Chouteau Ave. St. Louis FA1-2700
NJ W. S. Mills ..... 35 Sussex Ave. Madison FO7-7707
NJ H. R. Bancroft & Co. ..... 300 Cooper St. Collingswood 7 ..... UL6-0000
NY Brad-Tollefson Corp. ..... 3015 Monroe Ave. Rochester 18 ..... HA6-0460
NC Manufacturers Sales Corp. ..... Box 147, Greensboro BR4-1401
Ohio Pettis-Ingram Co. ..... 1707 Mayfield Rd. Cleveland HU3-0300
Can Glandon Co. Ltd. ..... 605 Evans Ave. Toronto, Ont. RO8-0131

STEWART CORP. F. H. ..... 4011 N Rosewood Ave. Chicago 13, Ill CR3-6000
Cal F. W. Stewart Corp. ..... 3404 S Grand Ave. Los Angeles 7 ..... RT-0130

STEWART ENGINEERING CO. ..... 407 Dana Creek Rd. Santa Cruz, Cal GA6-0100

STOKES CORP., F.J. ..... 5500 Tabor Rd. Philadelphia 20, Pa CH9-0100
Cal F. J. Stokes Corp. ..... 3701 E Colorado Blvd. Pasadena MY1-0210
Conn F. J. Stokes Corp. ..... 77 Bedford St. Stamford DA3-0000
Ga J. D. Robertson, Inc. ..... 1010 Maple Dr. NE, Atlanta 5 ..... SP7-1000
Ill F. J. Stokes Corp. ..... 1075 N Lincoln Ave. Chicago 40 ..... UP9-4000
Mass F. J. Stokes Corp. ..... 6 Vernon St. Framingham Center TR5-0410
NJ F. J. Stokes Corp. ..... 2105 Morris Ave. Union MU9-3000
NY F. J. Stokes Corp. ..... 1705 Monroe Ave. Rochester 18 ..... GR3-1940
Ohio F. J. Stokes Corp. ..... 5000 E 52nd St. Cleveland 25 ..... MU1-7230
Ohio F. J. Stokes Corp. ..... 5000 Far Hills Ave. Dayton 5 ..... AD3-0002
Tex The Haynie Co. Inc. ..... 3323 Mercer St. Houston 27 ..... JA9-2272
Wash Walsh Associates ..... 1300 Poplar Pl. Seattle 44 ..... EK3-1105
Can F. J. Stokes Corp. ..... 1470 Kipling Ave. N. Rexdale, Ont. CH7-0501

STONE & WEBSTER ENGINEERING CORP. 45 Fulton St. Boston 7, Mass BA5-7900
Cal Stone & Webster Eng. Corp. ..... 225 Montgomery St. San Francisco 4 ..... YU1-4004
Cal Stone & Webster Eng. Corp. ..... 600 S Grand Ave. Los Angeles 17 ..... MA6-0221
Ill Stone & Webster Eng. Corp. ..... 55 S Clark St. Chicago 3 ..... BA6-2700
NY Stone & Webster Eng. Corp. ..... 60 Broad St. New York 4 ..... BO9-4004
Tex Stone & Webster Eng. Corp. ..... 600 Esperson Bldg. Houston 2 ..... CA6-0234
Wash Stone & Webster Eng. Corp. ..... 707 Lloyd Bldg. Seattle 1 ..... MA3-5700
Eng Stone & Webster Engg. Ltd. ..... 21, Red Lion St. London W. C. 1 ..... CHANCERY
Fr Stone & Webster Engg., S. A. ..... 24 Ave. Des Champs Elysees, Paris 8e BAL74-20
Neth Stone & Webster Engg (Holland) N.V.
Apostelgasse 135, Amsterdam AMSTEL0001

STOW MFG. CO. ..... 305 Bear St. Binghamton, NY BA3-6671
Cal W. T. Hanna ..... 200 E Anaheim, Wilmington
NY C. H. Easley ..... 500 S 6th St. Mt. Vernon

STRATTON-AMT CO. ..... Grapevine, Tex. BA3-4001

SUPLEX, LTD. ..... 56-58 Uxbridge Rd. London W5, Eng EAL7770
Can Smyth Electronic Components Ltd. ..... 1477 St. Antoine St. Montreal 3 ..... WE3-4004

SULZER BROS. LTD. ..... Winterthur, Swit ..... (052) 8 11 22
NY Sulzer Bros. Inc. ..... 16 Church St. New York 7 ..... DE4-1821
Arg Sulzer Hermanos ..... Calle Defensa 131, Sur piso, Buenos Aires 34-1588
Bra Sulzer Freres S.A. ..... Avenu Rio Branco 311, Rio de Janeiro 22.20.14
Eng Sulzer Bros. (London) Ltd. ..... 31, Bedford Square, London W.C. 1 ..... MU7600
Fr Co de Constr Mecan Procedes Sulzer ..... 10, Rue Cognacq-Jay, Paris Vome DI50-40
Jap Sulzer Bros. (Japan) Ltd. ..... Mitsubishi Tout 5-chome Chuo-ku, Tokyo 33.7034-4
Mex Sulzer Hermanos S.A. ..... Paseo de la Reforma 134-408 35-01-80
Nor Sulzer Brothers ..... Nordisk Aktieselskap, Ridderveiogaen, Oslo 46.70.70
Peru Sulzer Hermanos, Ltda. ..... San Cosilla, 1, 6 Dr. Lozano 78.21.56
Spain Sulzer Hermanos S. A. ..... Alcala Galiano 4, Madrid 2.36.01.36
Arab Sulzer Freres ..... 44, Rue Kasr el Nil, Cairo 4.81.51
S Af Sulzer Bros. (S Africa) Ltd. ..... 200, Market St. Johannesburg 34-0041

SUMNERS & MILLS INC. ..... 511 Lower St. Dallas 7, Tex

SUMNER SOLLITT CO. ..... 207 N Michigan Ave. Chicago 1, Ill ST3-4400

SUPER TOOL CO. ..... First & Bridge Sts. Elk Rapids, Mich AB4-0151
Cal Super Tool Co. ..... Box 311, Glendale 3 ..... CH5-7000
Ill S. Tanner ..... 300 Sunwood Ave. Wheeling LE7-0400
Ill Super Tool Co. ..... 10161 Pacific Ave. Franklin Pk GL1-5347
Mich E. C. Doepker ..... 10721 Milford Rd. New Hudson GE1-2350
Minn Super Tool Co. ..... Brooklyn Center, Denver 30
NY Sanjon, Dana & Applegate ..... 87 Leonard St. New York 13 ..... BA9-4770
Pa R. P. Cannon ..... 779 E Anchor St. Philadelphia PL6-4120

SUPERIOR AIR PRODUCTS CO. ..... 132 Andrews St. Newark 5, NJ MA3-5715

SUPERIOR ELECTRIC CO., THE ..... 383 Middle St. Bristol, Conn LU2-5561
Cal The Superior Electric Co. ..... 14903 Titus St. Van Nuys ST0-5024
Cal The Superior Electric Co. ..... 646 Marshall St. Redwood City EM5-8040
DC The Superior Electric Co. ..... 455 12th St. NW, Washington ST3-6774
Fla The Superior Electric Co. ..... DePaul Plaza, Miami 38 ..... PR4-4130
Ill The Superior Electric Co. ..... 6028 W Roosevelt Rd. Oak Park EU5-5400
Mass The Superior Electric Co. ..... 6 Abbott Rd. Wellesley Hills CE7-0750
Mich The Superior Electric Co. ..... 13600 Michigan Ave. Dearborn LU5-3235
NY The Superior Electric Co. ..... 209 Park Ave. New York 17 ..... TU6-7000
Ohio The Superior Electric Co. ..... Box 135, Medina PA8-1316
Pa The Superior Electric Co. ..... Pt. Washington Ind. Park, Pt. Washington CH6-5007
Tex The Superior Electric Co. ..... 519 Meadrow Bldg. Dallas 6 ..... EM4-4000
Wash The Superior Electric Co. ..... 610 3rd Ave. Seattle 4 ..... MU2-1333
Can American Superior Elec. Co., Ltd.
174 Evans Ave. Toronto 18, Ont. CL6-0310

SUPERIOR STEEL DIV., COPPERWELD STEEL CO. Conneaut, Pa WA1-4730
Cal Superior Steel Division ..... 5216 Wilshire Blvd. Los Angeles 36 ..... WE3-1446
Ill Superior Steel Div. ..... 300 1st Natl. Bank Bldg. Evanston UR6-2241
Mich Superior Steel Division ..... 606 Fisher Bldg. Detroit 2 ..... TR5-1070
NY Superior Steel Div. ..... 1212 Ensel Bldg. Buffalo 3 ..... TL6-8400
NY Superior Steel Div. ..... 0400 Chrysler Bldg. New York 17 ..... TU6-7740
Ohio Superior Steel Division ..... 1110 Talbott Tower, Dayton 2 ..... BA9-0122

SUPERIOR TUBE CO. ..... Box 191, Hatboro, Pa DE5-3870

SURETY RUBBER CO. ..... N High St. Carrollton, Ohio 627-2166
Cal The Macintosh Co. ..... 3400 Bridgeway Blvd. Sausalito EX3-1412
NJ C. E. Bauer ..... Scout Rd. Brielle CA5-0200
Tex Van Dorser & Hawkins, Inc. ..... 6017 Clinton Dr. Houston 20 ..... WA1-2134
Per Internl. Bean & Copper Co. Inc. ..... 76 West St. New York City 6 ..... WH3-0065

SURFACE COMBUSTION DIV., MIDLAND-ROSS CORP. ..... 2375 Dorr St. Toledo 1, Ohio JE4-4611
Ala F. J. Evans Engineering Co. ..... 800 S 27th St. Birmingham FA5-7191
Conn W. W. Young & Assoc., Inc. ..... 16 Echo Lake Rd. Watertown CR4-3841
Ill Surface Combustion Division ..... 118 S Prospect Ave. Chicago TA3-0118
Ind Surface Combustion Division ..... 3400 College Ave. Indianapolis 20 ..... CL1-7111
Mass Surface Combustion Division ..... 1235 Hancock St. Quincy 69 ..... PR3-9600
Mich Surface Combustion Division ..... 14405 W 8 Mile Rd. Detroit 35 ..... UN4-6075
NJ W. F. Wright ..... 50 Mt. Vernon Ave. Irvington ES3-6155
NY Surface Combustion Division ..... 317 Gate Tower Bldg. Syracuse HA0-3058
Ohio Surface Combustion Div. ..... 14000 S Miles Rd. Cleveland 20 ..... MO5-2300
Pa Surface Combustion Division ..... Donahue Ex. Bldg. Ardmore MD7-3300
Pa Surface Combustion Division ..... 4184 Library Rd. Pittsburgh 34 ..... LO1-6113

SURPRISE TOOL CORP. ..... 1 Clifton Blvd. Clifton, NJ PR8-3000
Cal Tubomatic ..... 3011 Tubeway, Los Angeles 23 ..... BA9-7721
Ga J. M. Tull Metal & Supply Co. ..... 200 Marietta St. NW, Atlanta AL3071
Ill C. A. Roberts Co. ..... 2401 - 25th Ave. Franklin Park GL5-0400
Mass Bruno-Valve Co. ..... 100 Hedge Ave. Ext. Cambridge 40 ..... UN4-4300
Mich Service Steel Div. ..... 13700 Sherwood Ave. Detroit TW3-3060
NJ A. R. Murray Co. Inc. ..... Box 476, Elizabeth EL4-1200
NJ Schnitzer Alloy Products Co. ..... 325 Pine St. Elizabeth EL3-1300
NY F. von Rosh ..... Box 358, Port Washington PO7-1229
NY Whitehead Metals, Inc. ..... 200 W 19th St. New York 14 ..... WA4-1500
Ohio Cleveland Tool & Supply Co. ..... 1407-37 W 6th St. Cleveland CH1-8400
Ore Electric Steel Foundry Co. ..... 2141 NW 25th Ave. Portland 10 ..... CA8-2141
Pa R. T. Penn Co. ..... Erie Ave. & "D" St. Philadelphia GA6-4600
Tex R. J. Gallagher Co. ..... 1402 Gentz St. Houston WA8-8401
Tex Standard Iron & Mfg. Co. ..... K.C.S. Track 6 4th St. Fort Arthur TU6-0377
W Va Michaelis Corp. ..... 1002 Hansford St. Charleston DU4-1781
Can Alloy Metal Sales, Ltd. ..... 516 Lakeshore Blvd. E. Toronto, Ont. EM3-6411
Can Firth Brown Steels Ltd. ..... 849 Cote de Liesse Rd. Montreal HA-0001

SYLCOR DIV. SYLVANIA ELEC. PRODS. INC. SUB. GEN. TEL. & ELECTRONICS CORP. ..... Centuryon Park Rd. Hicksville, NY

SYLVANIA ELEC. PRODS. INC. CHEM & MET. DIV. SUB. GEN. TEL. & ELECTRONICS CORP. ..... Towanda, Pa AM6-2121
Cal Sylvania-Chem & Met. Div. ..... 1011 Adrian Rd. Burlingame
Ill Sylvania-Chem & Met. Div. ..... 2001 N Cornell Ave. Chicago
Mass Sylvania-Chem & Met. Div. ..... 100 Sylvan Rd. Woburn
Mich Sylvania-Chem & Met. Div. ..... 7000 Intervale Ave. Detroit
NJ Sylvania-Chem & Met. Div. ..... 1000 Hopler St. Teaneck
Ohio Sylvania-Chem & Met. Div. ..... 800 W 1st St. Dayton
Pa Sylvania-Chem & Met. Div. ..... 4700 Parkside Ave. Philadelphia
Pa Sylvania-Chem & Met. Div. ..... 200 Mt. Lebanon Blvd. Pittsburgh

SYLVANIA ELEC. PRODS. INC. ELECTRONIC TUBES DIV. SUB. GEN. TEL. & ELECTRONICS CORP. ..... Emporium, Pa 300
Cal Sylvania Elec. Products, Inc. ..... 1011 Adrian Rd. Burlingame OX7-3500
Ga Sylvania Elec. Products, Inc. ..... 2115 Sylvan Rd. SW, Atlanta PO8-3633
Ill Sylvania Elec. Products, Inc. ..... 2001 N Cornell, Melrose Park ES9-6200
Ind Sylvania Elec. Products, Inc. ..... 1000 Hopler St. Teaneck AT9-8484

SYLVANIA ELEC. PRODS. INC. SPECIAL PRODS. OPERATION SUB. GEN. TEL. & ELECTRONICS CORP. ..... 40 Boston St. Salem, Mass PS5-4200
Cal Sylvania Electric Products Inc. ..... 1011 Adrian Rd. Burlingame OX7-3500
Cal Sylvania Electric Products Inc. ..... 6500 E Gaphen St. Los Angeles BA8-0171
Ill Sylvania Electric Products Inc. ..... 2001 N Cornell Ave. Melrose Park FE5-0100
Mass Sylvania Electric Products Inc. ..... Ipswich EL6-4311
Mich Sylvania Electric Products Inc. ..... 7000 Intervale, Detroit WE3-8705
NJ Sylvania Electric Products Inc. ..... 1000 Hopler St. Teaneck CH4-8000
NY Sylvania Electric Products Inc. ..... 1700 Broadway, New York 19 ..... JU6-5424
Ohio Sylvania Electric Products Inc. ..... 800 W 1st St. Dayton BA5-0027
Pa Sylvania Electric Products Inc. ..... 4700 Parkside St. Philadelphia OR7-1000

SYLVANIA ELECTRONIC SYSTEMS SUB. GEN. TEL. & ELECTRONICS CORP. ..... 40 Sylvan Rd. Waltham 54, Mass TW4-8444
Ala Sylvania Electronic Systems ..... 115-134 Gallatin St. Huntsville ZE0-0001
Cal Sylvania Electronic Systems ..... 2000 Santa Monica Blvd. Santa Monica EX3-0111
Colo Sylvania Electronic Systems ..... 615 N Tejon, Colorado Springs ME5-2132
DC Sylvania Electronic Systems ..... 1220 Connecticut Ave. NW, Washington FE7-0500
Mass Sylvania Electronic Systems ..... 40 Sylvan Rd. Waltham TW4-8444
NJ Sylvania Electronic Systems ..... 10 Spring St. Red Bank SH1-0140
NY Sylvania Electronic Systems ..... 226 N Washington St. Rome PT9-1100
Ohio Sylvania Electronic Systems ..... 800 W 1st St. Dayton BA5-0027

SYNTHANE CORP. ..... River Rd. Oaks, Pa GL3-2211
Cal Synthane Corp. ..... 618 W Garfield Ave. Glendale 4 ..... CH5-1000
Ill Synthane Corp. ..... 8711 Narragansett Ave. Morton Grove OR3-3800
Ind Synthane Corp. ..... 4600 Allisonville Rd. Indianapolis 5 ..... LE6-3650
Kan Synthane Corp. ..... Box 191, Mission HE3-3355
Mass Synthane Corp. ..... 494 Main St. Wakefield CR5-3604
Mich Synthane Corp. ..... Box 168, Orchard Lake ME5-8600
NY Synthane Corp. ..... 50 Studio Arcade, Bronxville 8 ..... DE7-0012
NY Synthane Corp. ..... 137 W Commercial St. East Rochester LU6-0613
Ohio Synthane Corp. ..... 2697 Lee Rd. Cleveland 20 ..... WA1-0020
Tenn Synthane Corp. ..... Box 10107, Knoxville 19 ..... KN6-2650
Tex Synthane Corp. ..... Box 946, Richardson AD6-1401
Wis Synthane Corp. ..... 816 E Silver Spring Dr. Milwaukee 11 ..... WO5-0800

SYNTRON CO. ..... 205 Lexington Ave. Homer City, Pa
Cal The C. E. Holmes Co. ..... 107 N Ave. 64, Los Angeles 42 ..... CL6-2356
Colo Krippner & Polley ..... 1160 Eliot St. Denver 4 ..... CH4-4630
Ill Syntron Chicago Sales Co. ..... 320 N Pulaski Rd. Chicago 24 ..... VA6-0056
Ind R. O. Whitwell & Assoc. ..... 6030 E Washington St. Indianapolis FL8-5374
Mich Hiltonics, Inc. ..... 13720 Fenton Ave. Detroit 27 ..... BR5-4200
Mo Kinnick Co. ..... 7130 W Florissant Ave. St. Louis 20 ..... CO1-0322
NY Syntron Hewett Sales Co. ..... 80 Rte. 017, Hasbrouck Heights AT9-0220
Ohio R. O. Whitwell & Assoc. Inc. ..... 21120 Lorain Ave. Cleveland 26 ..... ED9-6686
Pa Jack Covert Associates ..... 200 Jonquil Pl. Pittsburgh 34 ..... LE1-4471
Pa Dance Corp. ..... Fairview Village RE2-2000
Tex W. Pat Faulks Co. ..... Box 12253, Fort Worth 16 ..... PE8-2394
Per Dage Corp. ..... 210 E 44th St. New York 17, NY MU8-0750

SYSTEM ENGINEERING LAB. INC.
Box 9148, Fort Lauderdale, Fla LB4-7616

SYSTRON-DONNER CORP. ..... 888 Galindo St. Concord, Cal MU5-3020
Cal Auto-Winter Inc. ..... 1086 Continente Ave. Inglewood OR0-6144
Colo Bentrill Associates ..... 1270 S Florida Blvd. Denver WE4-4445
Ga E. G. Holmes & Associates ..... 4000 Roswell Rd. NE, Atlanta 5 ..... EL5-0000
Ill Lang & Clemens Co. ..... 6738 N Olmsted Ave. Chicago 31 ..... SP4-2610
Minn Engineering Products Associates ..... 2119 Grand Ave. St. Paul 5 ..... MO4-3443
Mo H. W. Kuchrina & Co. ..... 4000 Duncan Ave. St. Louis OL5-7000
NY Burlingame Associates ..... 110 S Fulton Ave. Mt. Vernon MO6-7520
Ohio Tilly Co. ..... 2346 Warrensville Center Rd. Cleve 18 ..... SU1-5355
Tex A. Barnes Co. ..... 3003 Lemmon Ave. Dallas LA5-0735
Wash H. Levinson Co. ..... 1311 E Denny Way, Seattle EA5-5100
Can Electrodesign ..... 8234 St. Lawrence Blvd. Montreal, Que. DU9-1014

TBG, INC. ..... 2 Austal Way, Syosset, NY OY1-4000
Mass TBG, Inc. ..... 8 Ulman St. Somerville 43 ..... MO4-9400
NY TBG Refractories Division ..... 200 Teahens Ave. Yonkers YO8-2511

TBW COMPUTERS CO. ..... 8400 Fallbrook Ave. Canoga Park, Cal BR-4000
Cal TBW Computers Co. ..... 220 N Canon Dr. Beverly Hills
Ga TBW Computers Co. ..... 2372 Peachtree Rd. NE, Atlanta
Ill T-D-W Computers Co. ..... 200 S Michigan Ave. Chicago
NY T-D-W Computers Co. ..... 200 E 42nd St. New York
Tex T-D-W Computers Co. ..... 1510 Main Aparton Bldg. Houston

Fr Co-Europeenne d'Automatisme Electronique 97, rue de Maragnan, Paris 8
India R. M. Kapur ..... 56, Ganesh Chandra Ave, Calcutta
Jap A. G. Yashovsky ..... c Yoshimoto, Chiyoda-ku, Tokyo

TALBOT STEAM TUBE CO. LTD.
Green Ln. Velsoll, Sheffs, Eng VAL21222
NJ Brachert Steel Inc. ..... Cliffside Park WEI-6300

TAPCO DIV THOMPSON RAMO WOOLDRIDGE INC. ..... 23555 Euclid Ave. Cleveland 17, Ohio FY1-7500
Ala Tapco Division ..... 5012 Memorial Pkwy. SW, Huntsville ..... AD 8-7751
Cal Tapco Division ..... 107 Hindry St, Inglewood CH0-3051
Cal Tapco Division ..... 111 Main St. Los Alos WYS-2114
DC Tapco Division ..... 206 16 St. NW, Washington 6 ..... MEt-5045
Fla Tapco Division ..... 1632 E Colonial Dr. Orlando CH1-5161
Kan Tapco Division ..... 6531 E Kellogg, Wichita 7 ..... MUS-0236
Mo Tapco Division ..... Manchester at Wellston Rd. St. Louis 43 ..... LA7-4021
Ohio Tapco Division ..... 111 Talbot Tower, Dayton 2 ..... BA2-0280
Okla Tapco Division ..... 15 N Robinson, Oklahoma City 2 ..... CE3-5530
Tex Tapco Division ..... 3040 Marquette, Dallas EM0-5030
Utah Tapco Division ..... 446 E 2nd, S, Salt Lake City 11 ..... DA8-0473
Wash Tapco Division ..... 3000 E Marginal Way, Seattle 4 ..... MC2-7300

TAYLOR FIBRE CO. ..... Norristown 18, Pa OL2-2811
Cal Taylor Fibre Co. ..... 1400 Palomares Ave. La Verne MA5-0121
Cal Taylor Fibre Co. ..... 1366 Laurel St, San Carlos LT1-8000
Conn Taylor Fibre Co. ..... 367 Farmington Ave. West Hartford AD6-2776
Ga Taylor Fibre Co. ..... 2072 Peachtree Rd. NE, Atlanta 9 ..... CR7-0416
Ill Taylor Fibre Co. ..... 4001 W Lawrence Ave, Chicago 60 ..... AV3-0474
Mich Taylor Fibre Co. ..... 116 Main St. Rochester OL3-1211
Mo Taylor Fibre Co. ..... 816 Rosewood Dr. Kirkwood TO6-4020
NY Taylor Fibre Co. ..... 76 S Tyson Ave. Floral Park FI7-8474
Ohio Taylor Fibre Co. ..... Box 160 Far Hills Branch Dayton AX3-9016

TAYLOR FORGE & PIPE WORKS Box 485, Chicago, Ill RE-2-8400
Cal Taylor Forge & Pipe Works ..... 3401 S Seymour Ave. Los Angeles 22 ..... OV5-7188
Cal Taylor Forge & Pipe Works ..... 417 Market St. San Francisco 5 ..... YU1-5775
Ga Taylor Forge & Pipe Works ..... 142 Carnegie Way, NW, Atlanta 3 ..... JA1-0566
NY Taylor Forge & Pipe Works ..... 30 Church St. New York 7 ..... CO7-0010
Okla Taylor Forge & Pipe Works ..... 204 Mid-Continent Bldg. Tulsa 3 ..... LD4-7270
Pa Taylor Forge & Pipe Works ..... 600 Suburban Sta. Bldg. Philadelphia 3 ..... LO8-2080
Pa Taylor Forge & Pipe Works ..... 600 Bell Ave. Carnegie WA3-0080
Tex Taylor Forge & Pipe Works ..... 707 N Dunman St. Houston 1 ..... CA8-0121
Wash Taylor Forge & Pipe Works ..... 3rd & Stewart, Seattle 1 ..... MA4-5080
Can Taylor Forge & Pipe Wks of Can Ltd. 1075 Burlington St. E, Hamilton, Ont LO-3651
Can Taylor Forge & Pipe Wks of Can Ltd. 611 Lancaster Bldg, Calgary, Alta AM3-5040
Can Taylor Forge & Pipe Wks of Can Ltd. 455, Craig St. W, Montreal, Que UNe-4437

TAYLOR INSTRUMENT COS. ..... 30 Ames St. Rochester 1, NY BE5-2000
Cal Taylor Instrument Co. ..... 5555 Riverside Dr. Los Angeles 39 ..... NO4-4111
Cal Taylor Instrument Co. ..... 1051 Timothy Dr. San Leandro LO9-1401
Ill Taylor Instrument Co. ..... 400 South Blvd. Oak Park EU6-0800
NY Taylor Instrument Co. ..... 111 W 40th St, New York 18 ..... JU6-3844
Ohio Taylor Instrument Co. (Ohio) Inc. Akron 3
Pa Taylor Instrument Co. ..... 1811 Pennsylvania Blvd. Philadelphia 3 ..... LO3-7180
Aust Taylor Instruments Cos. of America Pty. Ltd. Melbourne
Can Taylor Instrument Cos. of Can Ltd. Toronto, Ont.
Eng Taylor Controls Limited ..... London
Fr Taylor Instrument (Fr) S.A.R.L. ..... Paris
Ger Taylor Instrument G.m.b.H. ..... Frankfurt am Main
Mex Taylor Instrument (Mex) S.A. ..... Municipio de Jesus, Ville de Mexico

TAYLOR SIGNS CO., CHAS. ..... Box 38, Cincinnati 14, Ohio WA1-0130
Cal The Pyon-Siggers Co. ..... Box 729, Whittier OX3-7742
Conn C. Taylor Sons Co. ..... 600 Beachwood Rd. Orange ST9-2720
Ga C. Taylor Sons Co. ..... 1040 Greenbrier Rd. Atlanta 6 ..... SS0-0473
Ill C. Taylor Sons Co. ..... 6400 Hyde Park Blvd. Chicago 15 ..... MU4-3091
Mich C. Taylor Sons Co. ..... Box 107, Franklin MA6-0070
Mo C. Taylor Sons Co. ..... Box 30, Webster Groves 19 ..... WO1-4017
NJ C. Taylor Sons Co. ..... 8 Haddon Ave. Haddonfield HA6-2270
Ohio C. Taylor Sons Co. ..... 3001 Mayfield Rd. Cleveland 18 ..... EX1-2810
Ohio Chas. Taylor Sons & Co. ..... 300 W 7th St. Salem EP7-3834
Pa C. Taylor Sons Co. ..... 1205 Frazier Bank Bldg. Pittsburgh 22 ..... AT1-8300
Tex Chas. Southern Supply Co. ..... 6000 Murphy Ave. Houston 21 ..... OL4-0886

TECHBETTIN INC. ..... 9 Commercial Ave. Hoboken, NJ WE3-4900

TECHNICAL ASSOCIATES ..... 140 N Providencia Ave. Burbank, Cal TH8-4149
Cal C. W. Reed Co. ..... 409 Hamilton Ave. Palo Alto DA6-4011
Cal C. W. Reed Co. Inc. ..... 6000 S Hoover. Los Angeles 44 ..... PL3-2221
Colo C. W. Reed Co. ..... P.O. Box 15004, Denver SU8-6600
Mo Annunciator-Sensator Corp. ..... 317 W Jewel Ave. St. Louis 22 ..... TA3-1881
Utah C. W. Reed Co. ..... 130 S 2nd E, Salt Lake City EL5-7148

TECHNICAL MEASUREMENT CORP.
441 Washington Ave. North Haven, Conn CE7-2591
Cal Technical Measurement Corp. ..... 1316 Jones St. San Francisco OR6-1788
Ga Ellison Co. ..... 888 Healey Bldg. Atlanta 3 ..... JA6-4524
Ill Electronic Aids ..... 1106 W Lawrence, Chicago 40 ..... LO1-1042
NY QED Electronic Sales, Inc. ..... 9 Elm Ave. Mt. Vernon MO4-3160
Tex Technical Measurement Corp. ..... Meadow Bldg. Dallas 6 ..... EM0-0661
Wash R. B. Schultz Co. ..... 4227 Aurora Way, Seattle 3 ..... MA4-8080
Can A. Crawford, Ltd. ..... 5500 Tonge St. Willowdale, Ont. BA5-7081
Jap Nichimen & Co., Ltd. ..... Box 1136, Tokyo
Fr R. H. Stern ..... Zeil 133, Frankfurt/Main, Germany 5-7080

TECHNICAL OPERATIONS, INC. South Ave. Burlington, Mass BR2-3000
NY Picker X-Ray Corp. ..... 1070 Mamaroneck Ave. White Plains

TECHNICAL SERVICE CORP. 972-78 S 3rd, Louisville 3, Ky JU7-6476

TECHNOLOGY INSTRUMENT CORP. 221 Main St. Acton, Mass CO3-2791
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Minn Collins & Associates ..... 5404 E Lake St. Minneapolis 6 ..... PA4-5900
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NY TIC of NY ..... 900 Northern Blvd. Great Neck HO7-1430
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Pa Tektronix, Inc. ..... 7700 Ogontz Ave. Phila WA4-5070
Va Tektronix, Inc. ..... 9010 Columbia Pike. Annandale CL6-9111

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Ill R. L. Sales ..... 5001 Waterfow Dr. Deerfield CT3-3003
Minn J. J. Gibson ..... 170 Blue Ave. Rockford TR0-5040
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Ohio Ampex Computer Products ..... 802 W 1st St. Dayton 2 ..... BA5-1121
Pa Ampex Computer Products ..... 947 Old York Rd. Abington TU7-0016
Pa M. Weissenfeller ..... Box 488, Levittown WS-0443

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Tex R. L. Sugarc Co. ..... M & M Bldg. Houston 2 ..... CA8-5080
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Tex Thermo Electric Co., Inc. ..... 2711 Broad St. Houston 17 ..... MO4-0400

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Tex Meyer F. Smith & Co. ..... 2504 S Main St. Houston JA5-1121
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Ohio Service Equip. Electronics, Inc. 4040 Euclid Ave. Cleveland 3 ..... HE1-7000
Tex D. Roper ..... P.O. Box 14028, Fort Worth 17 ..... TE1-1004

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Tex Tracerlab, Inc. ..... 2410 South Blvd. Houston 6 ..... JA3-0421
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Colo Tube Tues ..... 1400-5th St. Denver 7 ..... CH6-0007
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Ill Tube Tues ..... 600 S Michigan Ave. Chicago 5 ..... HA7-0004
Mass Tube Tues ..... 57 Construction Rd. Lexington 73 ..... VO8-0400
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NY Tube Tues ..... 150 Broadway, New York City 38 ..... WE5-8820
Ohio Tube Tues ..... 404 Wright Bldg. Tulsa 3 ..... LU5-0100
Pa Tube Tues ..... 1710 Grant Bldg. Pittsburgh 19 ..... AT1-0000
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Ill Wallace Mfg. Co. Ltd. ..... 1200 Livesey Pkwy. Chicago 14
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Tex E. L. Lindsey Co. ..... Box 12008, Houston 24 ..... JA5-0420
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Pa Turco Products, Inc. ..... 6447 Market St. Upper Darby GR5-0811
Pa Turco Products, Inc. ..... 530 6th Ave. Pittsburgh 30 ..... EX1-1004
Tenn Turco Products, Inc. ..... 871 McCallie Ave. Chattanooga 3 ..... AM5-2230
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Cal Fielder ..... Box 886, Tustin LI4-5616
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Minn Ulmk Corp. ..... 32 River St. Minneapolis Sta. Minneapolis CT9-3000
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NJ Super Electronic Sales Co. Inc. 700 Bergen Blvd. Ridgefield
NY Technical Sales, Inc. ..... Holden Rd. Montpelier 11
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Ohio O. K. Bensberg & Assoc., Inc. 601 Reading Rd. Cincinnati
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Ohio Union Carbide Chemicals Co. ..... 5001 S Harvard, Tulsa 36 ..... RH-0150
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Tex Union Carbide Chemicals Co. ..... 2600 W Alabama, Houston 27 ..... MO7-0561
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Mich Union Carbide Metals Co. ..... 19651 W Seven Mile Rd, Detroit 35 ..... DI1-0121
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NY Union Carbide Metals Co. ..... Box 960, Niagara Falls BO5-0821
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Mich Union Carbide Plastics Co. ..... 19651 W 7 Mile Rd, Detroit 35 ..... DI1-0121
Minn Union Carbide Plastics Co. ..... 4010 W 65th St, Minneapolis 24 ..... WA1-8685
Mo Union Carbide Plastics Co. ..... 720 N Kirkwood Rd, St. Louis 22 ..... YO5-0440
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Ohio Union Carbide Plastics Co. ..... 3200 Victory Pkwy, Cincinnati 8 ..... CH1-3021
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Conn K. F. Thomas Co. ..... 84 Chelton Ave, West Hartford AD8-0047
Ind A. H. Hessel ..... 60 Hartman Blvd, Valparaiso HO8-4000
Minn Finishing Equipment & Supply Co. ..... 3700 E Lake St, Minneapolis 6 ..... PA3-1397
Mo M. A. Alsop Co. ..... 2010 Hampton Ave, St. Louis 10 ..... ME7-0110
NY J. F. Weller ..... 999 Main St, E, Rochester 5 ..... CH8-0500
Ohio J. C. Lee & Co. ..... 7000 Dunn Rd, Cleveland 48 ..... LO1-0400
Pa P. E. Spindell ..... 700 N Evans St, Glenside TU7-7400
Pa P. W. Robertson ..... Box 8774, Wilkinsburg, Pittsburgh CH9-4000
Can R. W. Dunn & Co. ..... 1000 St. Augustin St, Montreal 20, Quebec VE5-1400

VARD ..... 2901 E Colorado, Pasadena, Cal SY6-8231
Pa G. R. Rupar ..... 1721 Oliver Bldg, Pittsburgh 22 ..... AT1-5005

VARIAN ASSOCIATES ..... 611 Hansen Way, Palo Alto, Cal DA5-4000

VARI-L CO., INC. ..... 207 Greenwich Ave, Stamford, Conn DA3-2576
Cal Thorson Co. ..... 7301 Melrose Ave, Los Angeles 46 ..... OL2-4400
Can Electrodynamics ..... 9104 St. Lawrence Blvd, Montreal 11 P.Q. DU9-5014

VAR-LAC-OID CHEMICAL CO. ..... 116 Broad St, New York 4, NY WH4-0340

VARO, INC. ..... 2201 Walnut St, Garland, Tex RH4-0340
Ariz Perkinsh Electronic Assoc. ..... 5000 E Thomas St, Phoenix 16 ..... AM4-4224
Cal Varo Inc. Electrodynamics Div. ..... 400 E Gutierrez St, Santa Barbara WO6-0116
Cal Varo Inc. ..... Box 19002, Anaheim HI4-0164
Cal Perkinsh Electronic Assoc. ..... 941 Chaboneau Rd, Palo Alto DA1-0004
Cal Perkinsh Electronic Associates ..... 3040 Engineers Rd, San Diego 11 ..... BR6-8801
Cal Perkinsh Electronic Assoc. ..... 5007 W Washington Blvd, Los Angeles 16 ..... VE5-1001
Ill AC Optical Co. ..... 8874 W Herbert Dev, Chicago 35 ..... RO8-0700
Mex Perkinsh Electronic Assoc. ..... 2743 Mesa, NE, Albuquerque AM5-0707
NY Varo Inc. ..... Box 10001, 35 Syracuse GL4-0300
Ohio Varo Inc. ..... 7000 Wallace St, Dayton BR5-0400
Wash Varo Inc. ..... Box 2007, Arlington, Va EM4-1110

VEEDER-ROOT, INC. 70 Sargeant St, Hartford 2, Conn JA7-7201
Cal Veeder-Root Inc. ..... 2700 Park St, Monrovia CH5-0400
Cal Milligan-Optics Co. ..... 1400 Bayshore Blvd, San Francisco 24 ..... JU5-1007

Ill Vander-Rost Inc. ..... 540 W Washington Blvd. Chicago 6 ..... STP-0800
Minn Vander-Rost Inc. ..... 5 Maple St. Stevens PR-8110
Mo Vander-Rost Inc. ..... 3306 Washington Blvd. St. Louis 3 ..... JE-4866
NY Vander-Rost Inc. ..... 1770 Broadway, New York 10 ..... CI7-0960
Ohio Vander-Rost Inc. ..... 13017 Cedar Rd. Cleveland 8 ..... SW-1044
Pa Vander-Rost Inc. ..... 138 S Easton Rd. Glenside TU7-0700
Pa Vander-Rost Inc. ..... 355 Fifth Ave. Pittsburgh 22 ..... GR1-3770
SC Vander-Rost Inc. ..... Box 307 Spartanburg Hwy. Greenville CH9-0771
Tex Vander-Rost Inc. ..... 3000 Cedars Ln. Dallas 29 ..... FL3-5720
Wash Paterson & Lee Co. ..... 543 Central Bldg. Seattle 4 ..... MU3-1466

VENNER ELECTRONICS, LTD. Kingston By-Pass, New Malden, Surrey, Eng KAL.2442
Can Electronetics ..... 9256 St. Lawrence Blvd. Montreal 11
Can Electronetics ..... 694 Brewery Dr. Ottawa, Ont.

VENNES pour le TRAITEMENT des EAUX, S. A.
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Swed Degremont Vattenvard A. B. ..... Upplandsgatan 2, Lidingo 1, Stockholm

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VICKERS-ARMSTRONGS (S. MARSTON) LTD. Swindon, Wiltshire, Eng STD41
Can Canadian Vickers Ltd. ..... Box 666, Pt. D'Amour Sta. Montreal CLS-5661
Egypt The Standard Engineering Co. ..... 70, El-Gomhouria St. Cairo 70970
Ind Vickers India Private Ltd. ..... 136, Sunder Nagar, New Delhi 11 70048
Ind Studio Tecnico G. Cassani ..... Via Buonarroti 14, Milan 468.55.57
Jap Jardine Matheson & Co. (Jpn) Ltd. ..... Central Box 508, Tokyo ..... 03-2241[illegible]
NZ Cosgrove & Salmon Ltd. ..... 51-57, Panama St. Wellington 45-170
Nor Lehmkuhl A/S ..... Hovfaret 11, Oslo 426891
Pak Vickers (Pakistan) Ltd. ..... Wallace Rd. Karachi 50000
Port Agen Anglo-Port De Rumanes, S.A.R.L. ..... Praca Do Municipio 35-45, Lisbon 2 [illegible]
Swit G. De Morle Ltd. ..... 22, Schinbelen, Zurich ..... [illegible]
S Af Vickersdomscrago South Africa (Pty.) Ltd. ..... Lowndes St. Johannesburg 33-6966/7

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Ill Vickers, Inc. DPD ..... 3666 W Potomac Ave. Chicago 45 ..... ED9-2135
Mass E. F. Huber Co. ..... 60 Central St. Wellesley 81 ..... CH5-0865
Mich Vickers, Inc. DPD ..... 14400 Linwood, Detroit 38 ..... TO3-5100
NY Vickers, Inc. DPD ..... 50-01 Main St. Flushing LD3-1816
Ohio Vickers, Inc. DPD ..... 5120 Monroe Rd. Cleveland 16 ..... EU6-1305

VICKERY CO. ..... 410 14th St. Oakland 12, Cal GL1-1140
Cal The Vickery Co. ..... 2052 W Venice Ave. Los Angeles 6 ..... AX1-4100

VICTOR ADDING MACHINE CO. 3900 N Rockwell St. Chicago 18, Ill EV9-8100
Ariz P B S W Supply & Equipment Co. ..... 830 W Washington St. Phoenix AB6-4343
Cal Victor Adding Machine Co. ..... 5600 W Olympic Blvd. Los Angeles 6 ..... DU5-4021
Ill Victor Adding Machine Co. ..... 540 N Lakeville St. Chicago 70 ..... WE4-0800
Mass Victor Adding Machine Co. ..... 54 Elliot St. Newton Highland (Boston) LA1-7181
Mich Victor Adding Machine Co. ..... 14001 Fenkell Detroit 27 ..... VE7-0800
NY Victor Adding Machine Co. ..... 650 3rd Ave. New York 16 ..... MU9-4000
Ohio Victor Adding Machine Co. ..... 1401 Lakside Ave. Cleveland 14 ..... EU5-7750
Pa Victor Adding Machine Co. ..... 134 N 16th St. Philadelphia 3 ..... LO8-5070

VICTOR CHEMICAL WORKS ..... 155 N Wacker St. Chicago 6, Ill DE3-4010

VICTOREEN INSTRUMENT CO. 5806-11 Hough Ave. Cleveland 3, Ohio EN1-4200
Cal C. W. Fowler Co. ..... 2810 Fair Oaks Ave. South Pasadena
Ga E. G. Holmes & Associates ..... 4000 Roswell Rd. NE, Atlanta 5 ..... EL5-8000
Ill The Victoreen Instrument Co. ..... 6700 S Ashland Ave. Chicago 36 ..... BR7-6111
Md C. E. Snow Co. ..... 6110 Wisconsin Ave. Bethesda OL4-1707
NY The Victoreen Instrument Co. ..... 10 E 40th St. New York 16 ..... MU6-1040
Tex Southwest Electronic Ltd. ..... The Meadows Bldg. Dallas 6 ..... EM8-1071
Wash AVM ..... 1300 Prospect St. Seattle 9 ..... MA5-0177
Can Radiatec, Ltd. ..... 6200 Maynard St. Montreal, Que HU9-5517
Per Terminal Radio(International) Ltd. ..... 540 W 57th St. New York 11 ..... CI6-2300

VICTORY ENGINEERING CORP. Springfield Ave. Springfield, NJ DR8-8900
Cal Western ..... 7407 Melrose Ave. Los Angeles 46 ..... WE3-7270
Colo E. Kelley ..... 308 E 4th St. Loveland MO7-1370
Ill L. W. Beier Co. ..... 6520 W North Ave. Chicago NE7-0400
Minn R. Peters & Co. ..... 2070 Centre St. Saint FA3-1040
Mich Barnes-Crowe & Co. ..... 19700 Grand River Ave. Detroit 23 ..... VE3-7700
Mo F. C. Benson & Co. ..... Davidson Bldg. Kansas City 9 ..... GR3-1264
NY G. P. Mills Co. ..... 1 Wall's Ln. Pelham PE9-4310
Ohio Scott & Steffen ..... 1894 Euclid Ave. Cleveland TO1-3000
Pa Technical Representative ..... 220 S Easton Rd. Glenside TU7-1325
Tex E. F. Aymond Co. ..... 4823 Maple Ave. Dallas LA6-8800
Wash F. H. Hedge Co. ..... 2322 Eastlake Ave. Seattle EA5-1010

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DC D. Vidner & Sons ..... Box 1974, Washington NA6-3004
W Va R. Vidner & Sons ..... Box 55, Charleston 343

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Cal Vitro Chemical Co. ..... 1001 Pontius Ave. Los Angeles 64 ..... GR1-0865

VITRO CORP. OF AMERICA ..... 201 Madison Ave. New York 16, NY MU3-4700
Cal Vitro Corp. of America ..... 1001 Pontius Ave. LA 5 ..... DU5-7535
Ill Vitro Laboratories ..... 200 Pleasant Valley Way. West Orange MU1-0400
NY Vitro Chemical Co. ..... 201 Madison Ave. New York MU3-4700
NY Vitro Engineering Co. ..... 7 E 10 St. New York 3 ..... GR7-0900

VOGT MACHINE CO., INCORP. ..... 1000 W Gandy St. Louisville, Ky MU4-0471
Cal E. Vogt Machine Co. ..... 604 Monterey Pass Rd. Monterey Park CU3-8000
Ill H. Vogt Co. ..... 900 Monopolis Bldg. Chicago 3 ..... FR9-0270
Mo H. Vogt Co. ..... 6011 Clayton Rd. St. Louis 17 ..... PA6-5000
NJ H. Vogt Co. ..... 607 Wilson Bldg. Camden 7 ..... PR1-0400

NY H. Vogt Co. ..... 66 Rockefeller Plaza, New York 20 ..... CI6-4660
Ohio H. Vogt Co. ..... 710 Williamson Bldg. Cleveland 14
Tex H. Vogt Co. ..... 1018 Life of American Bldg. Dallas 1 ..... RI8-9476

VOGUE INSTRUMENT CORP. ..... 2300 Linden Blvd. Brooklyn, NY HY9-5300
Cal The Cabes Co. ..... 5540 Auzy Dr. San Jose AN9177
Colo LZP Electronics, Inc. ..... 601 S Jason St. Denver SH4-1311
Ill Carter Electronics, Inc. ..... 3214 S Scottdale Ave. Chicago 60 ..... RE5-0777
Kan G. E. Harris Co. ..... 1023 E Douglas, Wichita MU8-9236
Mass Dynamic Devices, Inc. ..... 11 Albion St. Wakefield 245-8100
NY Ellis-Baker Corp. ..... 11 Northern Blvd. Great Neck HU7-5145
NY S D M Associates, Inc. ..... 1040 W Fayette St. Syracuse HO6-5941
Ohio Kilsop-Whelan Corp. ..... 10 N Main St. Chagrin Falls 247-0097
Pa Holdworth & Co. ..... 498 S Springfield Rd. Clifton Heights MA6-5200
Tex Packard Associates ..... Love Field Terminal Bldg. Dallas 35 ..... FL7-5715
Va Tim Jay Co. ..... 5400 Wilson Blvd. Arlington 1 ..... JA4-0707
Wash Stanley Enterprise ..... 127 River St. Seattle PA3-5500

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Per Volk Radiochemical Co. ..... 10 E 40th St. New York 60, NY

VORAC CO. ..... 147 Meadow Rd. Rutherford, NJ WE3-1000
Pa Eisbergen Industries ..... Sharon
SC C. Armstrong ..... 112 Lancaster Ln. Greenville

VULCAN ELECTRIC CO. ..... 88 Holton St. Danvers, Mass SP6-1720
Cal Cooper & Assoc., Inc. ..... 6140 Lankershim Blvd. N Hollywood PO5-0881
Cal Sullivan Co. ..... 400 Mather St. San Francisco 11 ..... TU8-3713
Ga C. H. Clear & Associates ..... 3272 Peachtree Rd. NE, Atlanta 5 ..... CE3-8881
Ill Steven Engineering Co. ..... 8306 W Lawrence Ave. Chicago 30 ..... PR6-0438
Mich H. C. Engelman Co. ..... 27050 Grattan Ave. Roseville PR8-5000
Minn W. B. Odegard Co. ..... 6004 Walker St. Minneapolis 27 ..... WE9-2224
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NY Vulcan Electric Co. ..... 400 Lexington Ave. New York 17 ..... LE3-0800
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Pa F. P. Johns ..... 419 Twickenham Rd. Glenside TU6-2560
Wash J. C. McDougall Co. ..... 800 1st Ave. S, Seattle MA9001
Wis C. C. Schneider & Associates ..... 4301 W Greenfield Ave. Milwaukee EV3-3070

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Cal W-K-M Division ..... 1901 W 8th St. Los Angeles
Ill W-K-M Division ..... 80 E Jackson Blvd. Chicago
NY W-K-M Division ..... 40 Rockefeller Plaza, New York City
Ohio W-K-M Division ..... 11055 Lorain St. Cleveland
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WADE COMPLIANCE LTD. ..... 270 High Rd. Ilford, Essex, Eng ILF1106/7

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Ga Wagner Electric Corp. ..... 1806 Monroe Dr. NE, Atlanta 6 ..... EV9-8540
Ill Wagner Electric Corp. ..... 1700 Elmhurst Rd. Chicago NE3-8500
Mo Wagner Electric Corp. ..... 8001 E 80th St. Kansas City 30 ..... HU8-1000
NY Wagner Electric Corp. ..... 386 Garfield, Jersey City 4, NJ DE8-1140
Tex Wagner Electric Corp. ..... 955 Slocum St. Dallas 7 ..... RI1-4021

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WAKEFIELD INDUSTRIES, INC. 5721 W Grace St. Skokie, Ill OR3-0900
Cal S. A. Brown ..... 19901 Lakeside St. Chatsworth DE9-2797
Cal White & Co. ..... 788 Mayview Ave. Palo Alto DA2-3560
Md D. A. Thibodeau ..... 6130 Baltimore Blvd. Hyattsville WA5-8844
Mass The H. J. Smith Co. ..... 815 Washington St. Newtonville LA7-6904
NY M. J. Seery & Son ..... 30 Church St. New York CO7-0025
Pa The Sealite Co. ..... Box 68, Schuylkill PR9-0110
Tex R. M. Bobel ..... 10131 Goodyear Ave. Dallas FL2-5826
Wash G. W. Barr ..... 801 NE 45th St. Seattle 5 ..... ME3-8844

WALBERT CO. ..... 10321 S La Cienega Blvd. LA 45, Cal SP6-8323
Cal Western Sales & Engineering ..... 7407 Melrose, Los Angeles 46 ..... WE3-7270
Fla E. C. Raymond & Associates ..... Box 8215, Madeira Beach WA1-9755
Ill D. Hansen & Co. ..... 807 E Willow Ave. Wheaton MO6-1323
Md F. D. Marcy Associates ..... 1100 Raymond Blvd. Newark MA3-3365
Minn W. Richter Corp. ..... 605 E Washington St. Hanover TA6-2881
Mich W. Spencer Co. ..... 20000 Greenfield, Detroit 35 ..... YO6-1322
NY W. Richter Corp. ..... 107 Delaware Terrace S. North Syracuse GL4-1961
NY J. Miller Co. ..... 1 Continental Ave. Forest Hills 75 ..... BO8-6440
Tex Aimp Engineering Co. ..... Box 9255, Dallas 14 ..... JA4-3000

WALL COLMONOY CORP.
STAINLESS PROCESSING DIV. 4500 Lake E. St. Detroit 3, Mich TU8-3300
Cal Wall Colmonoy Corp. ..... 1466 Wolf Rd. Monterlie
Ohio Wall Colmonoy Corp. ..... 5223 Webster St. Dayton 24
Pa Wall Colmonoy Corp. ..... Box 298, Morrisville
Tex Wall-Colmonoy Corp. ..... 5858 W Malone, San Antonio WA3-4666

WALL TUBE & METAL PRODUCTS CO. Box 330, Newport, Tenn HE2391
Cal L. S. Dunn, Jr. ..... 25 Hawthorne St. San Francisco 5 ..... EX3-8204
Ill R. P. Curtis ..... 5800 N Lincoln Ave. Chicago 45 ..... LO1-7204
NY J. T. McAllister ..... 48 South St. New York 5 ..... BO9-5400
Ohio M. F. Thomas ..... 400 The Arcade, Cleveland 14 ..... PR1060X

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Cal Wallace & Tiernan, Inc. ..... 1713 S California Ave. Monrovia ELD-1200
Cal Wallace & Tiernan, Inc. ..... 2100 Pulgas Ave. San Francisco 94 ..... MU7-7165
Colo Wallace & Tiernan, Inc. ..... 3040 E Colfax Ave. Denver 6 ..... EA2-5408
Ill Wallace & Tiernan Inc. ..... 5040 S 27th Ave. Broadview MA6-8000
Mich Wallace & Tiernan Inc. ..... 14000 Schoolcraft Detroit 27 ..... WO-0097
Mo Wallace & Tiernan, Inc. ..... 2319 Hampton Ave. St. Louis 10 ..... MU7-2215

Mo Wallace & Tiernan, Inc. ..... 2000 Cherry St. Kansas City 8 ..... VA1-5458
NY Wallace & Tiernan Inc. ..... 3407 Delaware Ave. Kenmore 17 ..... TS8-8044
Ohio Wallace & Tiernan, Inc. ..... 4000 W 150th St. Cleveland 35 ..... CL3-6464
Tex Wallace & Tiernan, Inc. ..... 5610 Dyer St. Dallas 6 ..... EM8-6371
Wash Wallace & Tiernan, Inc. ..... 2010 Western Ave. Seattle 1 ..... MA2-3545
Can Wallace & Tiernan Ltd. ..... 225 Weston Ave. Scarborough, Ont. PL5-2158

WALLIN OPTICAL SYSTEMS, INC.
18527 Ventura Blvd. Tarzana, Cal DI5-4670

WALLINGFORD STEEL CO. ..... 40 Valley St. Wallingford, Conn CO8-2261
Cal Wallingford Steel Co. ..... 2400-A W Magnolia Blvd. Burbank VI8-6400
Ga A. R. Lanon ..... 211 Cincinnati Dr. Marietta 40-7-1540
Ill C. G. Stevens Co. ..... 20 S Jefferson St. Chicago 6 ..... FR2-7000
Mass Wallingford Steel Co. ..... 20 Providence St. Boston 16 ..... HA6-7555
Mich Wallingford Steel Co. ..... 16115 Myers Rd. Detroit 35 ..... DI2-1441
Minn Lofley Associates of Minnesota ..... 6084 W Walker St. Minneapolis WE9-5141
NY Wallingford Steel Co. ..... 9-11 E 44th St. New York MU7-0847
NY Brace-Mueller-Huntley, Inc. ..... 1897 Elmwood Ave. Buffalo 7 ..... VI8700
NY Brace-Mueller-Huntley, Inc. ..... Box 184, Rochester 1 ..... CO6-6560
NY Brace-Mueller-Huntley, Inc. ..... Box 1340, Syracuse 1 ..... HO3-5941
NY Eastern Metals Warehouse, Inc. ..... W Albany Dr. West Albany IV9-5241
Wis F. W. Lofley Associates, Inc. ..... 4004 N Milwaukee St. Milwaukee WO8-0942

WALTHAM ELECTRONICS CORP. 751 Main St. Waltham, Mass TW4-7870

WALTHAM PRECISION INSTRUMENT CO. 171 Crescent St. Waltham 54, Mass TW5-4000
Cal R. C. Dubin & Co. ..... 407 N Maple Dr. Beverly Hills BR6-0097
Cal M. H. D. Research, Inc. ..... 1071 Placentia Ave. Newport Beach MI9-1516
Colo Landon, Zachary & Peterson Co. ..... 601 S Jason St. Denver 23 ..... SH4-1311
Fla W. F. Hemminger Co. ..... 604 NW 70th St. Miami PL8-0000
Fla W. F. Hemminger Co. ..... 5727 Alcoma Ave. Winter Park MI7-4097
Kan Associated Industries, Inc. ..... 401 S Washington St. Wichita HO4-0801
Pa Emlen-Peterson Co. ..... King of Prussia Rd. Radnor MU8-0151
Tex Wyhenny Sales Co. ..... 105 Merchandise Mart Bldg. Dallas RU9-6120
Wash Associated Industries, Inc. ..... 1753 Rainier Ave. Seattle EA5-4400

WANG LABORATORIES ..... 72 Moore St. Hatfield, Mass GL3-3990
Ariz Milwin Associates ..... Box 146, Tarzana, Cal DI5-4825
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Ill B. T. Medrow & Co. ..... 1458 N Hudson St. Chicago
Ind B. T. Medrow & Co. ..... 1458 N Hudson St. Chicago, Ill.
Mich Geiss Engineering ..... 1434 E Outer Dr. Detroit 24
Minn B. T. Medrow & Co. ..... 1458 N Hudson St. Chicago, Ill.
NJ Cosse & Egert Corp. ..... 97 Reade St. New York 13 ..... WO4-0900
NY Cosse & Egert Corp. ..... 97 Reade St. New York 13 ..... WO4-0900
NY Doelitzer Electronics Corp. ..... Box 97, Fayetteville
Ohio Geiss Engineering ..... 20005 Bruce Dr. Willowick
Pa Cosse & Egert Corp. ..... Philadelphia PE9-2020
Tex N. S. Brown Associates ..... 1088 Boca Raton Dr. Dallas 20

WARDEN CORP. ..... 2304 Brighton Rd. Pittsburgh 12, Pa PO6-7757
DC Warren Corp. ..... 6007 Edgerton Ln. Springfield, Va FL4-0216
Ga Warren Corp. ..... 1350 Cheshire Bridge Rd. Atlanta 9 ..... TR5-0771
Ill Warren Corp. ..... 72 E Wacker Dr. Chicago FR5-7160
Mass Warren Corp. ..... Publicover, RFD Pantry Rd. Sudbury HU3-2426
Minn Warren Corp. ..... 3721 - 10th Ave. N, Minneapolis
Mo Warren Corp. ..... 4315 Angyle Ave. St. Louis 8
Ohio Warren Corp. ..... 1300 W 8th St. Cleveland 13 ..... MA1-0027
Ohio Warren Corp. ..... Box 72, Tuba LU5-1334
Tex Warren Corp. ..... Mercantile Continental Bldg. Dallas RI1-3610

WARREN PUMPS, INC. ..... Warren, Mass OS6-7711
Mass Warren Pumps, Inc. ..... 80 Pedmut St. Boston 19 ..... HA6-1400
NY Warren Pumps, Inc. ..... 30 Church St. New York 7 ..... CO7-0317

WATER ASSOCIATES ..... 45 Franklin St. Framingham, Mass TR6-0220
Ala Alabama Control Co. ..... Box 8095, Mobile 343-8220
Cal Rogers-Bullock Corp. ..... 8810 S Hammondale Ave. Los Angeles 44 ..... PL1-6170
Cal Applied Instruments ..... Box 548, Fullerton KE5-8861
Ill Thomas & Co. ..... 80 N LaSalle St. Chicago 2 ..... AN8-0466
NJ G. E. Stockhouse ..... 1100 Raymond Blvd. Newark 2 ..... MA4-6600
Ohio K. J. Lesker Co. ..... 5004 E 60th St. Cleveland 3 ..... EX1-7300
Ohio Hess Co. ..... 4400 E 5860 Pl. Tulsa RU4-8827
Pa K. J. Lesker Co. ..... 4000 Vernon Ave. Pittsburgh 27 ..... TU1-4000
Pa G. E. Stockhouse ..... 1410 Walnut St. Philadelphia RE4-3020
Tex R. Mack Gable Co. ..... 2700 Sumner Blvd. Houston 5 ..... MO4-1000
Can Electrodesign Ltd. ..... 9224 St. Lawrence Blvd. Montreal 14, P.Q. DU5-4014

WATERBURY FARREL FOUNDRY & MACHINE CO.
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Cal Waterbury Farrel Foundry & Mach Co. ..... 4707 E. Slauson Ave. Maywood LU1-4514
Ill Waterbury Farrel Foundry & Mach Co. ..... 5540 W North Ave. Oak Park EU8-5442
Mich Waterbury Farrel Foundry & Mach Co. ..... 3000 Lee Rd. Cleveland, Ohio WY1-6149
NJ Waterbury Farrel Foundry & Mach Co. ..... 44 Main St. Millburn DR6-2320
NM Waterbury Farrel Foundry & Mach Co. ..... 4707 E Slauson Ave. Maywood, Cal LU1-4514
NY Waterbury Farrel Foundry & Mach Co. ..... 44 Main St. Millburn, NJ DR6-2320
Ohio Waterbury Farrel Foundry & Mach Co. ..... 3000 Lee Rd. Cleveland WY1-6149
Pa Waterbury Farrel Foundry & Mach Co. ..... 44 Main St. Millburn, NJ DR6-2320
Wash Waterbury Farrel Foundry & Mach Co. ..... 4707 E Slauson Ave. Maywood, Cal LU1-4514

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Cal Mill-Series Associates ..... 415 S Pine St. San Gabriel CU8-7750
Fla W. B. Wimberly Co. ..... 532 S Fort Harrison Ave. Clearwater FO4-5618
Ill L.A. Chambers Co. ..... 6040 N Cicero St. Chicago 30 ..... RD9-0045
Minn F. Peterson Co. ..... 3401 Hennepin Ave. Minneapolis FR7-3025
Mo Kennig/Myers Associates ..... 4000 Main St. Kansas City 11 ..... EX1-7221
NJ Gaefer-Kemp Co. ..... 170 Eagle Rock Ave. Roseland CA8-4545
NJ Sinkenhoff Sales Co. ..... 170 Oakwood Ave. Orange OR4-6186
NY Sinkenhoff Sales Co. ..... 170 Oakwood Ave. Orange, NJ WH5-7033
NY Gaefer-Kemp Co. ..... 170 Eagle Rock Ave. Roseland, NJ CA8-4545
Tex Lawrence Sales Co. ..... Box 12096, Dallas FL2-7404
Wash Fervent Agencies ..... 209 1st Ave. S, Seattle 4 ..... MA4-6656

WATSON LTD., H. T. ..... Survey Lo. Wilson, Lanc. Eng. WEA0080
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Fr Comap ..... 11, Rue Guenot, Paris 11th AVE00-14
NZ Sulpur & Chem. Importing Co. Ltd. ..... Acme Ave. Auckland C.1 69-801

WATSON-MARLOW AIR PUMP CO. Modern Aerts, Eng HA1237
NY Schenker & Co. ..... 76 Cliff St. New York 38 ..... BEE-0313
Aust Chemical Course & Equip. Co. Pty. Ltd. ..... 22 McIvoy St. Waterloo New S Wales MX0404
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Den Viggo Petersen ..... Christian XI's Gade 4, Copenhagen, K. .. CP7004
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S Af Power & Chemicals Ltd. ..... 62 Marshall St. Johannesburg 22-7211

WATTS REGULATOR CO. ..... 10 Embankment St. Lawrence MU3-5377
Cal C. S. Bigelow & Assn. ..... 5420 E Washington Blvd. Los Angeles 22 .. RA5-3137
Ill M. Mercury Co. Inc. ..... 4800 S Western Ave. Chicago 9 ..... VIS-0404
NY John G. Kellyin ..... 4005 Concourse St. Long Island 1 ..... ST6-0447
Tex J. L. Fitzgerald ..... 4012 Cole Ave. Dallas 5 ..... LA1-7100

WAUKESHA FOUNDRY CO. ..... Lincoln Ave. Waukesha, Wis LB-4687
Cal Brunner Co. ..... 26 N Raymond Ave. Pasadena MU1-0005
Colo D. W. Jones, Jr. ..... 1311 Bannock St. Denver KE4-6140
Mass Lathrop Stainless Steel, Inc. ..... 180 Leland St. Framingham TR0-0020
Mo Clancey Co. ..... 5527 Broadway, Kansas City WE1-0500
NJ Waukesha Foundry Co. ..... 467 Springfield Ave. Hillsdale PS-1114

WAYNE KERR CORP. ..... 1633 Race St. Philadelphia 3, Pa LO6-4820
Cal Gerach Products, Inc. ..... 3211 S La Cienega Blvd. Los Angeles 16 .. UPO-2101
Colo Hycomic Measurements ..... 1305 S Bannock St. Denver 23 ..... PE3-0701
DC Burlingame Associates ..... 8216 Wisconsin Ave. DC OL4-0405
Ill Rust Associates ..... 209 Melbourne Rd. Riverside BE7-7555
Mass Burlingame Associates ..... 974 Main St. Waltham TW4-1396
Minn Engineering Products Associates .. 1021 University Ave. St. Paul 4 ..... MI9-3445
Mo Lee Mark Associates ..... Box 8487, Kansas City 14 ..... HU1-0313
NY Burlingame Associates ..... 610 S Fulton Ave. Mt. Vernon MO4-7540
Ohio Tilly Co. ..... 1946 Westerville Center Rd. Cleveland 19 ..... RE1-0305
Tex Alvey Engineering Co. ..... Box 8555, Dallas 14 ..... YA4-0000

WEBBER MFG. CO., INC. ..... Box 717, Indianapolis 6, Ind MA3-1379

WEBSLER INSTRUMENTS CORP. 790 E Merrick Rd. Freeport, NY MA3-0900
Cal California Hydraulics Corp. ..... 910 Howard St. San Francisco 3 ..... EXT-3200
Colo L. A. Christopher Co. ..... 1761 Franklin St. Denver KE4-1200
Ga Thermal Engineering Co. ..... 314 Buckhead Ave. NE, Atlanta 3 ..... CE7-0004
Ill Gaston City Instruments, Inc. .. 901 Sherman Ave. Evanston MO-4020
La Crosle Engineering Co. ..... 2017 Basin St. New Orleans JA5-0001
Minn Carr Bros. Co. ..... 08 Central St. Wellesley Hl CE6-7744
Mo Mid-States Supply Co. ..... 132 W 10th St. Kansas City VA4200
NJ F. D. Riggs Co. Inc. ..... 31 Stern Hwy 17, Rutherford WE7-0400
Ohio Rendell Engineering Sales Co. .. 1946 12th St. Cuyahoga Falls 920-0044
Pa G. F. Bernard Co. ..... 101 N 22rd St. Philadelphia 4 ..... RA5-0015
Tex J. E. Dowdell & Co. ..... 3109 Irving Blvd. Dallas 7 ..... FL7-0031
Wash Brunson & Leeland Instr. Co. ..... 2137 3rd Ave. Seattle 1 ..... MA3200

WELCH SCIENTIFIC CO. ..... 1515 Sedgwick St. Chicago 10, Ill ..... MI 3-3000

WELMATIC DIV. HUTTEE CORP 920 Royal Oaks Dr. Monrovia, Cal. HY9-6261
Cal Tech-Sec, Inc. ..... 8540 Wilshire Blvd. Los Angeles DU5-0001
Cal Tech-Sec, Inc. ..... 640 Dowdee St. East Palo Alto DA5-3551
Colo Vinson Associates ..... 3090 S Lincoln, Englewood SU4-3010
Fla W. A. Brown & Associates ..... 101 Cypress Rd. Indian River City AM7-0611
Ill Maximat Distributing Corp. ..... 6000 Lincoln Ave. Chicago OR6-1106
Mass Technical Instruments, Inc. ..... 90 Main St. Reading 944-3000
NJ L. A. Garrou & Associates ..... 975 Passaic Ave. Caldwell BO9-4300
NY Advanced Components ..... 119 Luther Ave. Liverpool GR5-7186
Pa L. A. Garrou & Associates ..... 720 Washington Ln. Jenkintown WA7-1300
Tex Harwell Associates ..... 3000 Lemmon Ave. Dallas LA6-7001
Wash Stanley Enterprise ..... 127 River St. Seattle PA5-3000

WELTRONIC CO. ..... 19400 W 8 mile Rd. Southfield, Mich KE2-3000
Cal Morgan/Brown/Tacoma ..... 9970 S Western Ave. Los Angeles PL6-1341
Ill A. L. Hanong ..... 141 Rex Blvd. Elmhurst TS4-0430
Ill LaFrance ..... 1136 W 69 St. Chicago HU3-9405
Ind J. Hoover ..... 2313 Mineville Dr. Richmond 28 ..... TO6-4884
NY G. Hack ..... 2000 Seg St. Buffalo TA4-0020
Ohio L. Berlo ..... 110 Far Hills Ave. Dayton BA5-0043
Ohio H. Fehlhoest ..... 2905 Merriweather, Warren EX9-3126
Pa T. Edwards ..... 10037 Pennsylv St. Philadelphia 16 ..... HO4-8000
Can E. Mann ..... 2001 Minnesota Ave. Windsor, Ont WA3-7884

WESTERN AFFILIATED ENGRS. CO.
Bldg 47, HSD, Clearfield, Ogden, Utah TA5-2223

WESTERN GOLD & PLATINUM CO. 525 Broker Blvd. Belmont, Cal LY3-3121

WESTERN NUCLEAR CORP. ... Box 1156, Idaho Falls, Idaho JA3-1220

WESTERN RADIATION LAB. ... 1107 V 24 St. Los Angeles 7, Cal RU-8200

WESTINGHOUSE ELEC. CORP. ATOMIC EQUIPMENT DIV. Cheswick, Pa .. EX3-4400

WESTINGHOUSE ELEC. CORP. ATOMIC FUEL DEPT. Cheswick, Pa EX3-4400

WESTINGHOUSE ELEC. CORP. ATOMIC POWER DEPT.
Box 355, Pittsburgh 30, Pa EX1-2000

WESTINGHOUSE ELECTRIC CORP. ELECTRONIC TUBE DIV.
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Cal Westinghouse Electric Corp. ..... 2210 Grant Ave. San Lorenzo 886-1000
DC Westinghouse Electric Corp. ..... 1625 K St. NW, Washington NA8-5040
Ill Westinghouse Electric Corp. ..... 2211 W Pershing Rd. Chicago 9 ..... WI6-3000
Mass Westinghouse Electric Corp. ..... 10 High St. Boston LI5-0600
Mich Westinghouse Electric Corp. ..... 8707 Trumbull Ave. Detroit TR6-7000
NJ Westinghouse Electric Corp. ..... MacArthur Ave. Bloomfield HU4-3000
Wash Westinghouse Electric Corp. ..... 1300 Poplar Pl. Seattle 44 ..... EA5-0300

WESTINGHOUSE ELEC. CORP. INSTRUMENT DEPT. Newark, NJ HU4-3000

WESTINGHOUSE ELEC. CORP. MATERIALS MFG. Blairsville, Pa BL3400

WESTINGHOUSE ELEC. CORP. NUCLEAR CONTROL EQUIP. SECTION
Pittsburgh, Pa EX1-2000
Pa Westinghouse East Pittsburgh Div. 700 Braddock Ave. E Pittsburgh EX1-2000

WESTINGHOUSE ELEC. CORP. STEAM DIV. Lester, Pa SA9-8565

WESTINGHOUSE TESTING REACTOR Box 1625, Pittsburgh 30, Pa 723-3011

WESTLAKE PLASTICS CO. ..... Box 16, Lenni Mills, Pa EL9-4000

WESTRONICS INC. ..... 3005 McCart, Fort Worth, Tex WA3-8211
Cal A. C. Cotland Co. ..... 4045 Van Nuys Blvd. Sherman Oaks ST9-0040
Cal Comet & Assoc. ..... Box 589, Redwood City EM9-3034
Fla Cal-Inc-Co., Inc. ..... 3708 Precision Dr. Orlando CR3-1601
Ind Franke Instrument Co. ..... 3001 Delaware Ave. Hammond WE1-4180
NM Banks, Fenger & Associates ..... 8510 Dominga Rd. NE, Albuquerque AM8-1704
NY Case Electric Corp. ..... 1044 Broadway, Albany HO6-3804
NY The Creek Corp. ..... Lumber Rd. Rodyn MA1-7410
Ohio Van Nuis Industrial Co. ..... P.O. Box 9000, Cleveland LA1-0040
Pa D. T. Daily & Co. ..... 651 W Rolling Rd. Springfield KD-1151
Tex Pan-Tech Engineering & Supply Co. 2700 Richmond Ave. Houston MO6-0040
Utah Banks, Fenger & Associates ..... 310 Rio Grande, Salt Lake City EL8-0427
Can Redmaine Limited ..... 6200 Maynard St. Montreal 9 ..... HU3-0207

WHEELABRATOR CORP. ..... 1402 S Byron St. Mishawaka, Ind BL5-2141
Cal R. G. Gaston ..... 3410 Mt. Diablo Blvd. Lafayette AT6-7700
Ga W. P. Bankston ..... 4710 Dudley Ln. NW, Atlanta BL4-7001
Ill R. L. Colleen ..... 400 Cambridge, Elmhurst TE4-7072
NY J. Phelan ..... 18 Lenox Ter. West Orange NJ RE1-0210
Ohio F. L. Hudson ..... 1220 W 3rd Ave. Columbus AX1-4070
Pa C. A. Hoffman ..... 72 Williams Ln. Hatboro OS6-4254
Pa D. Lindsay ..... 300 Barclay Ave. Forest Hill EL1-3300
Utah T. M. Draper ..... 1130 E 27th St. Salt Lake City DA6-5010

WHEELER ELECTRONIC CORP. 150 E Aurora St. Waterbury 20, Conn. PL4-3791
Cal Sperry Optomaps Co. ..... 2200 E Imperial Hwy. El Segundo OR6-0000
DC W. P. Drake ..... 1400 "G" St. NW, Washington FE3-7000

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Colo H. I. Glass & Assoc. ..... 500 Detroit St. Denver DE3-0101
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Ill Pentlo-LeVally Corp. ..... 625 W Adams St. Chicago CE8-0900
Kan The Hosier Co. ..... 300 Mercantil-Kanch Bldg. Mission BA1-0404
La Carter Equipment Co. ..... 1900 Veterans Memorial Hwy. Metairie .. VE6-0021
NY C. H. Wheeler Mfg. Co. ..... 500 Madison Ave. New York 17 ..... LD-5000
NC T. C. Heyward & Co. ..... 610 E Morehead St. Charlotte FE7-5070
Ore Hammond-Woolford Co. ..... 421 SW 6th Ave. Portland CA8-0000
Tex Allger & Sons ..... 5000 Fannin St. Houston CA6-0000
Va Paterson & Sperry Co. Inc. ..... 400 Madison Bldg. Arlington 9 ..... JA4-5000
Wash Hammond-Woolford Co. ..... 1411 4th Ave. Seattle MA3-4015

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Cal Bellins Electric Co. ..... 894 S Atlantic Blvd. Monterey Park CU8-1303
Colo R. E. Cobey Co. ..... 1700 Fulton St. Denver FE1-2140
Ill E. C. Bearman Co. ..... 2447 W Belmont Ave. Chicago 18 ..... WE3-9440
Ind Wright Engineering Co. ..... 4241 Melbourne Rd. Indianapolis 44 ..... WA3-5000
Md Dealing Electric Co. ..... 301 E 25th St. Baltimore 18 ..... HO7-5600
Mass Hoch/Hutchinson Assoc. ..... 19 Kenny Rd. Needham HE4-1300
Minn Northern States Sales Co. ..... 1400 Park Ave. Minneapolis FE6-4000
Ohio Bandwick & Associates ..... 7719 Reading Rd. Cincinnati 37 ..... PO1-1054
Pa W. Weinstein ..... 5150 Pennsylvania St. Philadelphia MA9-1002
Tex M. F. Kiesgen Co. ..... 4210 S MacGregor Way, Houston 21 ..... JA5-0400

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Cal Whiting Corp. ..... 12001 E Imperial Hwy. Santa Fe Springs UN4-2770
Ill Whiting Corp. ..... 80 S Clark St. Chicago 3 ..... PE5-0300
Mass Whiting Corp. ..... 600 Worcester St. Wellesley Hills 81 ..... CE5-0710
Mich Whiting Corp. ..... 970 S Hunter Blvd. Birmingham MI0-5137
Minn Whiting Corp. ..... 4000 W 60th St. Minneapolis 56 ..... WA5-7071
NY Whiting Corp. ..... 80 Church St. New York 7 ..... BE3-0000
NC Whiting Corp. ..... 1410 E Morehead St. Charlotte 3 ..... ED4-1040
Ohio Whiting Corp. ..... 2101 Linwood Rd. Cincinnati 3 ..... TR1-1100
Ohio Whiting Corp. ..... 8707 Mayfield Rd. Cleveland 24 ..... HE3-8000
Pa Whiting Corp. ..... 49 Rosedraw Pl. Ardmore MI0-8100
Pa Whiting Corp. ..... 1100 Empire Bldg. Pittsburgh 22 ..... AT1-4343
Tex Whiting Corp. ..... 5400 Timon Blvd. Houston 5 ..... JA4-2630

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NY The Whitlock Manufacturing Co. 1005 Sheridan Dr. Buffalo 23 ..... BE1450
NY The Whitlock Manufacturing Co. 114 Liberty St. New York 6 ..... COY-0217
Pa The Whitlock Manufacturing Co. 1007 Baltimore Ave. E Lansdowne GR5-1033

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Ind P. V. Nauff Co. ..... 800 E 25th St. Indianapolis 18 ..... HO7-1000
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NJ E. L. Baker & Associates, Inc. ... 1060 Bond St. Bloomfield ES6-0000
NY Wingate Electric Sales Co. ..... 666 Delaware Ave. Buffalo 2 ..... TF9-4000
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Tenn H. K. Miles & Associates ..... 2000-4 Franklin Rd. Nashville 4 ..... CY5-7454
Tex L. S. Ward Co. ..... 8000-11 Cowan St. Dallas 18 ..... HA-3004

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Fla B. A. Dickinson ..... 9011 Chippewa Tr. Maitland MO4-0172
Ill Carter/Mendrick/Cantu ..... 10040 S. Western Ave. Chicago BR4-0000
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Tex G.L.C. Dale ..... 6017 Snyder Plaza, Dallas 5 ..... EM1-0100
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Fr Interwelcome ..... 61 rue Dumiler, Boulogne-Billancourt, Seine MOH-00

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Md Will Corp. of Md ..... Box 5105, Baltimore 24 ..... DU1-4800
Mass Will Corp. ..... 979 Massachusetts Ave. Cambridge 38 ..... UN4-0970
NY Will-Buffalo, Inc. ..... Box 448, Buffalo 5 ..... LN6000
NY Will-New York, Inc. ..... Box 33, Tightbridge Sta. New York 53 ..... CY4-0000
W Va Will Corp. of W Va ..... Box 518, Spring Hill Sta. S Charleston 9 ..... PO8-1181

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WINCHESTER ELECTRONICS INC. 10 Wilfred Rd. Norwalk, Conn VU-7211
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Cal Winchester Electronics Inc. ..... 1510-5th St. Santa Monica EX4-2755
Colo Winchester Electronics Inc. ..... 1015-14th St. Denver KE4-0001
Fla Winchester Electronics Inc. ..... 711 Magnolia Ave. Orlando GA4-0000
Ill Winchester Electronics Inc. ..... 5700 W Devon Ave. Chicago 46 ..... RO5-3000
Md Winchester Electronics Inc. ..... 7005 Conley St. Baltimore AT6-1100
Mass Winchester Electronics Inc. ..... 55 Prospect St. Holliston GA8-0300
Mo Winchester Electronics Inc. ..... 400 W 24th St. Kansas City HI-0200
NY Winchester Electronics Inc. ..... 1 Flint St. Rochester BO6-0000
Tex Winchester Electronics Inc. ..... 615 N Monarch Ave. Dallas WH5-7211
Wash Winchester Electronics Inc. ..... 1201 S 40th St. Seattle 15 ..... MA3-0000
Can Winchester Electronics Inc. ..... 2107 Hingson Dr. Ottawa, Ont. CE4-4000

WISCONSIN CENTRIFUGAL FOUNDRY, INC.
900 E St. Paul Ave. Waukesha, Wis LB-0771
Colo D. W. Jones ..... 1311 Bannock St. Denver KE4-0011
Ill D. Goebel ..... 6126 Howard Ave. Hanover Isl. TS9-0000
Ken D. Gamble ..... 123 W 32nd St. Pittsburgh AD1-0210
Mass H. Boggess ..... 30 Gladwin Dr. Westfield LE8-0047
Mich J. I. Jordan ..... 15204 Mack Ave. Detroit 24 ..... TO6-7010
Minn G. S. Schwab ..... 111 N Greenfield Ave. Waukesha, Wis LT-0070
NJ S. Stoffel ..... 2 Wheeler Point Rd. Newark MA5-0000
Ohio F. Bonner ..... Box 95, Cincinnati 43 ..... LO1-0940
Ohio J. Boing ..... 1890 E 66th St. Cleveland WY1-0000
Okla P. Lindley ..... 4108 E 36th St. Tulsa RU-0040
Tex C. W. Lobey ..... 4116 Daley St. Fort Worth AT4-0000
Wash L. O'Connor ..... 605 W Irving Pl. Seattle 99 ..... AT3-0001

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Arg Evans Thomas & Cia., S.A. ..... Calle Defensa 405 (8th), Buenos Aires
Aust H. G. Thornthwaite Pty. Ltd. ..... 189-197 East St. Sydney, N.S.W.
BC Electric Power Equipment, Ltd. ..... 1386 Homer St. Vancouver
Can G. W. Sadler Co. Ltd. ..... 1040 William St. Montreal, Que
Can Jardine Engineering & Sales Co.Ltd. ..... Saint John, N. B.
Eng A. Wiseman & Co. Ltd. ..... 8 Southampton Row, London, W.C.1.
India Beatty & Gresham Ltd. ..... 9 Forbes St. Box No. 955, Bombay
India Beatty & Gresham Ltd. ..... 31 Chowringhee Ave. Calcutta
Port H. S. Pereira Gomescos Sucs, P ... Rua Fernandes Tomas, 806-1º
S Af A. & H. Mocney (Pty) Ltd. ..... Box 11440, Johannesburg
Spn P. Malcolm Thomson, S.C. ..... Velazquez 18, 6 Izqda, Madrid
Swed Eivi Hansen ..... Box 1028, Gothenburg 1

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Ala	Wolverine Tube Div. ..... 4017 5 1st Ave, Birmingham 1	PA5-4597
Cal	Wolverine Tube Div. ..... 16440 Vanowen Blvd, Sherman Oaks	STD-7550
Cal	Wolverine Tube Div. ..... Ferry Bldg, San Francisco 11	DU1-7200
Ill	Wolverine Tube Div. ..... 9040 W Collins Ave, Nostalgia 86	GL7-0131
Mich	Wolverine Tube Div. ..... 5555 South Doty Rd, Inkster	CR4-0501
Mo	Wolverine Tube Div. ..... 300 S Meramec Ave, Clayton 5	PA8-0140
NY	Wolverine Tube Div. ..... 11-02 30th Ave, Long Island City 6	RA1-4450
Ohio	Wolverine Tube Div. ..... 3040 Lee Rd, Cleveland 30	HC3-4600
Pa	Wolverine Tube Div. ..... 1 Avery Tree Bldg., Broad & Arch Sts, Phila 7	LO9-1400
Tex	Wolverine Tube Div. ..... 3004 Fenwood Dr, Dallas 30	FL7-0405

WOOD CENTER LABORATORY N. .... 1535 E 53rd St. Chicago 15, Ill. FA4-1754

WORCESTER VALVE CO., INC. 16 Parker St. Worcester 10, Mass

Cal	T. Meebel ..... 3443 Manine Dr, Newport Beach	
Colo	L. A. Christopher Co. ..... 1701 Franklin St, Denver	
Ga	L. Carew ..... 111 Tenth Terrace NW, Atlanta	CY7-0810
Ill	A. W. McInerney ..... 333 S Michigan Ave, Chicago	WA5-3208
Mass	W. J. Rapp ..... 300 Street St, Boston 16	LD-0015
Mo	T. C. Wellman ..... 4115 Manchester Ave, St. Louis	OL5-5050
NJ	Worcester Valve Co., Inc. ..... 30 N Van Brunt, Englewood	MU9-0500
NC	Ideo-Tric Controls Co. ..... Box 308, Charlotte	FM6-0021
Okla	R. F. Bagwell ..... 1700 E 6th St, Tulsa	LU9-0817
Tex	Worcester Valve Co., Inc. ..... 3400 Times Blvd, Houston	JA6-8060
Can	Newport Pneumatic Equipment & Supply Ltd. ..... 65 St. Clair Ave. E, Toronto 6, Ont.	WA6-5385
Mex	A. S. Fine ..... Sec Serja 415, Colonia Del Valle, Mexico 5	

WORLDIN, INC. ..... 230 W 39th St. New York 1, NY LO4-7990

Cal	Worldin, Inc. ..... 3097 Medium Ave, Los Angeles 39	RC9-1910

WORTHINGTON CORP. ..... 401 Worthington Ave. Harrison, NJ HU4-7200

Cal	Worthington Corp. ..... 3975 Santa Fe Ave, Los Angeles 54	LU9-0461
DC	Worthington Corp. ..... 16th & 18th, NW, Washington 6	ST3-0800
Ga	Worthington Corp. ..... 3005 Lakehill Dr. NW, Atlanta	TR6-0401
Mass	Worthington Corp. ..... 160 Causeway St, Boston 14	CA7-3200
Mich	Worthington Corp. ..... 15800 Puritan Ave, Detroit	BR5-8000
NY	Worthington Corp. ..... 60 Park Ave, New York 16	GR7-0040
Ohio	Worthington Corp. ..... 3133 Carnegie Ave, Cleveland 15	EU1-6000
Pa	Worthington Corp. ..... 11 Union Ave, Dale-Cynwyd	TR6-0000
Tex	A. M. Lockett & Co. ..... 1701 Mercantile Bldg, Dallas	RI-4166
Wash	Worthington Corp. ..... 3000 Western Ave, Seattle	MA5-0210

WYMAN-GORDON CO. ..... 195 Bedford St. Worcester, Mass PL6-5171

Cal	Wyman-Gordon Co. ..... 3975 Wilshire Blvd. Los Angeles 5	DU8-0405
Cal	Wyman-Gordon Co. ..... 3460 El Camino Real, Palo Alto	DA6-8972
Mich	Wyman-Gordon Co. ..... 2014 Book Tower, Detroit	WO1-5207
Tex	Wyman-Gordon Co. ..... 6401 Camp Bowie Blvd, Fort Worth 16	PE5-1427

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X-RAY DEPT. GENERAL ELECTRIC CO. 4855 Electric Ave. Milwaukee, Wis EV3-3211

Cal	GE-Industrial X-Ray Dept. ..... 816 Montgomery St. San Francisco 6	DO8-3740
Cal	GE-Industrial X-Ray Dept. ..... 2334 S Vermont Ave, Los Angeles 58	RO8-0007
Ill	GE-Industrial X-Ray Dept. ..... 1601 W Jackson Blvd, Chicago 7	EB9-0700
Md	GE-Industrial X-Ray Dept. ..... 5012 Greenmount Ave, Baltimore 10	HO7-0340
Mass	GE-Industrial X-Ray Dept. ..... 1550 Soldier Field Rd, Boston 35	ST5-1100
Mich	GE-Industrial X-Ray Dept. ..... 13001 W 7 Mile Rd, Detroit 19	KE7-0300
NJ	GE-Industrial X-Ray Dept. ..... 10 Commerce St, Springfield	DR9-4000
NY	GE-Industrial X-Ray Dept. ..... 41-15 27th St, Long Island City	EX3-5500
NY	GE-Industrial X-Ray Dept. ..... 835 Delaware Ave, Buffalo 5	TT3-0810
Ohio	GE-Industrial X-Ray Dept. ..... 3409 Carnegie Ave, Cleveland 16	UT1-0040
Pa	GE-Industrial X-Ray Dept. ..... 231 S Euclid Ave, Pittsburgh 6	EM3-3050
Pa	GE-Industrial X-Ray Dept. ..... Nursing Park Ave, at Ridge, Phila 32	BA5-7040

X-RAY MONITORING CORP. ..... 11-36 46th Rd. LIC, NY RH5-2040

YARDNEY ELECTRIC CORP. ..... 40 Leonard St. New York 13, NY WO6-3100

Cal	P. DeVere ..... 6050 Wilshire Blvd. Los Angeles 48	OL3-6444
DC	R. McAleer ..... 515 Premier Bldg, 1725 I St, NW, Wash	FE3-2094
Ohio	A. Clark ..... 4000 Dramburgh Blvd. Dayton	CH7-7712
Tex	W. Rider ..... 8334 Pecker St. Dallas	FL9-2040

YARNALL-WARING CO. ..... 102 E Mermaid Ln. Philadelphia 18, Pa CH6-3400

Cal	Yarnall-Waring Co. ..... 1300-30th St. San Francisco 10	VA5-2105
Cal	Yarnall-Waring Co. ..... 300 E Green St, Pasadena 1	MU1-7511
Ga	Yarnall-Waring Co. ..... 3006 Peachtree Rd, Atlanta 5	EM-0019
Ill	Yarnall-Waring Co. ..... 540 W Washington St, Chicago 6	DE5-3101
Mass	Yarnall-Waring Co. ..... 946 Great Plain Ave, Needham 92	HA4-2119
Mich	Yarnall-Waring Co. ..... 19400 Livernois Ave, Detroit 21	UN3-3500
Mo	Yarnall-Waring Co. ..... [illegible]	[illegible]
NY	Yarnall-Waring Co. ..... 45 W 45th St, New York 36	CO6-3040
Ohio	Yarnall-Waring Co. ..... 3035 Lee Rd, Cleveland 20	SE3-4600
Pa	Yarnall-Waring Co. ..... 2901 Liberty Ave. W, Pittsburgh 16	LO1-4404
Tex	Yarnall-Waring Co. ..... 1314 Wood St, Dallas 2	RT-4131
Wash	Yarnall-Waring Co. ..... 13300 - 15th Ave, NE, Seattle 55	EM9-5400

YEDA RESEARCH & DEVEL. CO. LTD. ..... Rehovoth, Israel

YELLOW SPRINGS INSTRUMENT CO. INC. Box 279, Yellow Springs, Ohio ..... [illegible]

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Ga	York Corp. ..... 895 Plaster Ave. NE, Atlanta 54	TR6-0322
Ill	York Corp. ..... 5060 W Touhy Ave, Chicago	SP4-2000
NY	Berg-Warner International Corp. ..... 405 York Ave, New York 22	PL1-6140
NY	York Corp. ..... 300 E 42nd St, New York 17	OX7-1800
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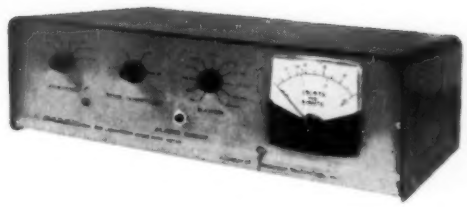

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